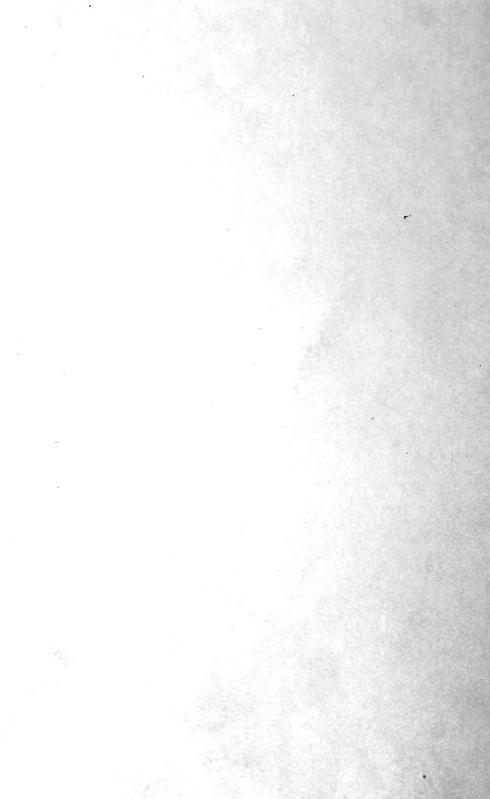
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CHARLTON ON THE STATE OF THE ST

UNIVERSITY AVE. NURSERIES.





## GENERAL CATALOGUE

.. OF ..

# Fruit Ornamental Trees

**SHRUBS** 

Roses, Paeonies, Small Fruits

Etc., Etc.

: : : ESTABLIJHED 1865. : : : :

Cultivated and For Sale by

## CHARLTON NURSERY COMPANY

University Avenue Nurseries

ROCHESTER, N. Y.

IMPORTERS, GROWERS, LANDSCAPE GARDENERS

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## USEFUL TABLES.

## Suitable Distances of Trees, etc., in Planting.

Apples—Standard	<b>4</b> 0	feet apart, e	ach wa <b>y</b>
" Pyramidal 15 to	18	"	"
" Dwarf (bushes)	10	44	66
Pears—Standard	25	"	66
" Pyramidal 16 to	18	66	"
" Dwarf	10	66	46
Cherries—Standard	20	66	66
" Dukes and Morellos 16 to	18	"	"
Plums—Standard	18	66	66
" Pyramidal 10 to	14	66	66
Peaches	18	**	6.6
Apricots 16 to	18	44	6.6
Nectarines		**	6.6
<b>Quinces</b>	12	**	4.4
Currants 3 to	4	"	66
Gooseberries 3 to	4	44	44
Raspberries 3 to	4	66	44
Blackberries 6 to	8	44	44
Strawberries	3	66	66
" For cultivation for market, with horse-			
hoe or cultivator 3 to	4	66	4.
Grapes	10	44	4.4

## Number of Plants on One Acre, at Various Distances.

Αt	3 :	feet apar	t, each wa	ly	4,840
	4	4.4	"		2,729
• •	5	4.6	6.6		
* 4	- 6	6.6	4.4		,
	8	6.6	4.6		680
44	10	66	66		430
66	12	66	"		325
44	15	6.6	**		200
66	18	4.6			135
4.6	20	6.6			110
66	25	**	6.6		70
"	30	4.6	6.6		50

To estimate the number of Plants required for an acre, at any given distance, multiply the distance between the rows by the distance between the plants, which will give the number of square feet allotted to each plant, and divide the number of square feet in an acre (43,560) by this number, the quotient will be the number of plants required.

## Directions for Transplanting Trees and Shrubs.

Preparation of the Soil—For fruit trees the soil should be dry, either natural or made so by thorough drainage, as they will not live or thrive on a soil constantly saturated with stagnant moisture. It should also be well prepared by twice plowing, at least, beforehand, using the subsoil plow after the common one at the second plowing. On new, fresh lands, remanuring will be unnecessary; but on lands exhausted by cropping, fertilizers must be applied, either by turning in heavy crops of clover, or well decomposed manure or compost. To insure a good growth of fruit trees, land should be in as good condition as for a crop of wheat, corn or potatoes.

Preparation of the Trees—This is one of the most important operations to be performed, and one in which the most fatal errors are liable to be committed. The object of pruning is two-fold. First, to secure a head properly shaped and sufficiently open to the sun and air for the successful ripening of the fruit; and second, to preserve the natural balance between the roots and branches of the tree, that a healthy growth may be secured.

When young trees are removed from the Nursery and many of the roots are broken and destroyed, as will be the case however careful the packing and transportation may be performed, it becomes very necessary that the balance should be preserved by a proper and judicious pruning. This pruning should be adapted to the size and condition of the tree, and at the same time the form should not be forgotten. It should be so close as to enable the roots to supply the demand for sap from the remaining branches, and at the same time no growth already secured should be wasted.

In both standard and dwarf trees, it will be usually found a safe rule to cut back in pruning at transplanting one-half the growth of the previous season. The ends of the larger roots should be made smooth with a sharp knife where they have been roughly cut by the spade in digging, as new roots will form and the injured parts heal more readily with this attention.

Planting—The holes should be dug large enough in the first place to receive the roots of the tree without cramping or bending them from their natural position. The tree having been properly pruned, should be held upright and the earth filled in about the roots, the finest and best soil from the surface being worked in among them, filling every space and bringing every root fully in contact with it. In extremly dry weather a pail of water may be poured upon the earth, to settle it about the roots, but this is seldom necessary. Finish the planting by placing soil enough about the tree to raise it somewhat higher than elsewhere, and press the soil carefully down with the foot. Care must be taken against planting too deep; when the earth settles about the tree it should stand at the same height as when in the Nursery. When set in Autumn it is well to raise a mound of earth about the trees a foot or more in height. This will keep them from being swayed by the winds or thrown out by the frost during the winter. It should be removed in the spring. In planting dwarf trees the stock on which they are budded, and no more, should be under ground. They will then stand firmly and will not lose their dwarf character by the rooting of the standard stock.

Staking—If trees are tall or in exposed situations, they should be supported by stakes to prevent injury from the action of the wind. Staking in done in the best manner by driving two strong stakes firmly in the ground, one on each side of the tree about a foot distant from it, and fastening the tree between them with bands of straw or other soft material, so that it may be kept in an upright position without chafing until the roots obtain a firm hold upon the soil.

Mulching—This is properly done by placing a layer of coarse manure or litter from three to six inches about the tree, extending one or two feet further in each direction than the roots. This keeps the ground moist and of equal temperature, renders watering unnecessary, and is in all respects preferable to it. Trees properly mulched are more certain to live and make much greater growth than those which are not so treated.

Cultivation after Planting-Here is the grand opportunity for the success of the skillful fruit grower. It it not enough for him that his trees are of the choicest sorts, selected with regard to the climate and adaptation to the uses for which they are designed, that they are properly pruned and planted in dry, mellow soil, thoroughly enriched and prepared for their reception, protected from the winds by proper staking, and that they are perfect in shape and thriftiness. He knows very well that all this may be properly and well done at great expense, and without further care be followed by an entire failure. So he watches their growth and defends them from their enemies, that the cankerworm and caterpiller do not find safe lodgment among their branches, nor the borer cut its way into their trunks, that the grasses do not form a close turf about them, or the cattle obtain access to them by neglected gates or fence corners, and break down the tender branches. He is well repaid, for they thrive and grow rapidly, the shoots are vigorous, the bark clean and smooth, and soon a most abundant crop of superior fruit testifies to his wisdom and care. His neighbor, perhaps with better soil, and equal care and experience in planting, having at the outset neglected these apparently trivial, but really important matters, sees instead of thrifty trees loaded with luscious fruit, the wreck of his hopes in a few mossy, scraggy, mis-shapen specimens of what he considers his ill-fortune, and hastens to remove He, too, is justly rewarded for his neglect, as is his more prosperous neighbor for his care.

Those who are obliged to plant trees in a field of grain or grass, should see that all such are carefully mulched with rough manure, and that the ground is kept loose and moist about the tree. A hoed crop is greatly preferable in such plantation for the first five years. After a growth for this time, standard apple, pear, cherry and plum trees will grow and produce fairly in turf. The dwarf trees should always be well mulched every year with loose manure, and the ground thoroughly cultivated. They will amply repay for this attention in the increased quantity and improved quality of the fruit.

Treatment of Trees that have been Frozen in the Packages, or Received during Frosty Weather, or after long Exposure—Place the packages, unopened, in a cellar or some such place, cool, but free from frost, until perfectly thawed, when they can be unpacked, and either planted or placed in a trench until convenient to plant. Treated thus they will not be injured by the freezing. If dried from long exposure, bury entirely in the ground, or place in water from 12 to 24 hours, and should be pruned more closely than ordinarily.

Pruning—Pruning after the first year should be varied according to the purpose of the planter and the variety of the tree. It should be trimmed as early as possible up to the height it is intended the future head should be, and the cutting off of large limbs may not in future be necessary. The removal of large branches should be avoided in all cases, whenever it is possible to do so, as decay is liable to commence at the point of separation and extend into the trunk; and whenever it is done, the wound should be carefully pared smooth, and a coating of paint or grafting wax applied to protect it from the action of the weather. After the removal of lower branches until the head has reached the desired height, the only pruning needed is to remove such branches as are crossing or interfering with each other; and to keep the head in symmetrical shape and well open to the sun and air. Trees should receive proper shape by judicious pruning and attention early in the spring of each year while they are young, and very little pruning will be needed afterward. When trees are to be pruned and trained for specific purposes and in a special manner, the orchardist will find full directions in the standard works on horticulture, which may be read with great benefit and followed with success, but are beyond the scope of an ordinary Catalogue.

Grape Vines—Require a dry, mellow, well-drained soil, deeply worked and well enriched, with a warm, sunny exposure. In planting give the roots plenty of room, and settle the soil firmly about them. A strong vine may be allowed to grow the first season without pruning; in November or December following, the growth should be cut back to three or four buds; the next season allow but two buds to grow, which should make canes seven to ten feet long and be cut back four to five feet, ready for fastening to the trellis. For the subsequent pruning of vines as well as trees, planters would do well to consult some practical work on the subject.

Berries—Should have a strong soil and be kept under constant cultivation. Mulching is of especial value. Raspberries and Blackberries should have old wood cut out each year, and new canes pinched off when three feet high. Strawberries should be mulched late in the fall; uncover the crown early in spring; remove mulch after fruiting and spade in light dressing of manure. If set for fruit, keep the runners cut off.

 $\pmb{\text{Currants}}$  and  $\pmb{\text{Gooseberries}}\textsc{--}\text{Need heavy mulching}$  and pruning, so that new wood will have room to grow.

Roses—Should have a deep, rich, well-drained soil, and should be severely prunned every spring before the buds start, cutting back all the last growth to three or four buds, except Climbing Roses, which may be first allowed to partly cover the space desired. Old decayed branches should never remain. Every Autumn compost should be placed around the stems of the plants, and spaded into the ground in the following Spring.

## Wintering Nursery Stock Procured in the Fall.

In sections where the winters are very severe, it is not advisable to set out young trees and plants in the fall, but the practice of procuring them in the fall, covering them with earth during the Winter, and planting them in the Spring is becoming more and more popular, as experience has demonstrated its advantages. In the Fall Nurserymen are not hurried in their own planting; the season for shipping them is comparatively long, and the weather not nearly so changeable as in the Spring. Railways are not so much hurried and there is much less chance for injurious delays than in the Spring. It being practicable to plant trees so procurred as soon as the frost is out, they become thoroughly established the first season.

Some have an impression that trees dug in the Fall and trenched in over Winter are worthless. This is a great mistake. Peach and some other young trees, if left standing during their first Winter, are frequently killed or injured by frost. While if dug in the Fall and treated as below described, they come through bright and uninjured.

To insure success, select a spot where no water will stand during the Winter, having no grass near to invite mice. Dig a trench deep enough to admit one layer of roots, and sloping enough to permit the trees to lie at an angle of not more than 30° with the ground. Having placed one layer of the roots in this trench, cover them with mellow earth, extending well up on the bodies, and see that this is firmly packed. Then add another layer of trees overlapping the first, and continuing as at first until all are heeled in. As soon as this is done, cover the tops so well with evergreen boughs that they will be thoroughly protected from winds.



HE growing importance of the University Avenue Nurseries as a great and convenient center for the distribution of high grade Nursery stock, yearly demands more space for descriptive notes and views. Thirty-seven years ago they were established, and since that time their growth has been like unto one of their own fine trees, healthy, vigorous and rapid. Adopting the newest and up-to-date methods, covering all lines of outdoor decoration, until now they are superbly stocked with one of the the most complete Nursery collections, especially of Ornamentals, in the United States. The collection, propagation and growth of such a stock as this

required many years of careful, persistent research and toil, for we have striven for

superiority of quality and genuineness of variety in every branch of our trade.

However, we do not recommend everything in this catalogue as being the very best or most desirable for everybody. Some varieties are best adapted to certain localities, others are singular or grotesque specimens of plant growth, admired by many, and wanted by only a few. Of the many species the distinction between the varieties is so slight that none but experts or amateurs will appreciate them, but it is our business to cater to all tastes, and therefore it is necessary to enumerate many things which are only valuable because rare or odd.

We are able to supply many items that do not appear in our catalogue, and should anything be desired that is not enumerated here, we shall be pleased to take the matter up through correspondence. Our location is in one of the most fertile, fruit growing regions in the State of New York, and gives us facilities for growing fruit and ornamental trees equalled by few and excelled by none; in fact, Rochester

is the nursery center of the world.

Our Nurseries are easily accessible from all points, and we are pleased to have customers visit them on any day except the Sabbath. A much better idea of our stock can be obtained in this way, and we shall be pleased at any time to see any of our customers. Spindling odds and ends collected by brokers from the cheapest sources, may be had at less prices than our well pruned, bushy, symmetrical young trees, and yet not be worth the planting.

If our Prices on any Article appear higher than those of some of our competitors, be assured that they are only enough higher to compensate for the superiority and quality that we expect to give every purchaser. Life is too short to squander in

nursing sickly trees or worthless varieties.

A Certificate of Inspection as to healthfulness and freedom from disease accom-

panies every shipment of our stock.

Landscape Gardening—Landscape Gardening as an art is becoming better understood than formerly, which fact has already been manifested in the increasing demand for more artistic designs for the laying out and planting of ornamental grounds.

We are prepared to attend to all the details of landscape art, including a topographical survey of lawns or other grounds by an experienced engineer, grading, locating and making roads and drives, arranging and planting trees, shrubs, vines, Selection of desirable sorts for orchards or fruit gardens may also be left to us.

Anyone requiring the services of a Landscape Architect, is invited to correspond Our Landscape Architect is one of the best known in the country, and has with us.

had over forty years' experience in this country and Europe.

Having an Immense Stock from which to make selections, we claim that our facilities to render full satisfaction in the way of laying out grounds and in new planting are unsurpassed

Avenue and Street Planting—Our magnificent blocks of Sugar and Norway Maples, Oaks, Lindens, Elms and Ashes speak for themselves as to our ability to supply trees

for this purpose, and to please both the taste and the pocketbook.

Parks and Cemeteries—Especially do we solicit calls from superintendents of Parks, Cemeteries and Public Grounds, in person or by letter. We have a very fine collection of Shrubs, Vines and Trees suitable for planting for immediate effect.

Estimates—When assortments of Trees, Plants or Shrubs are wanted in quantity,

send us a list for an estimate of cost, as we are frequently able to make some reduc-

tions in price on such orders.

"Our Friends Stay with Us."—We never regard the present transaction with any one as the last one we are likely to have with them, but as a preliminary to future business. We believe this has much to do with the fact that our customers remain our customers.

## FRUIT DEPARTMENT.

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### SELECT APPLES.

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The first fruit, both in importance and general culture, is the Apple. Its period, unlike that of other fruits, extends nearly or quite through the year. By planting judicious selections of summer, autumn and winter sorts, a constant succession can be easily obtained of this indispensable fruit for family use.

There is no farm crop which, on the average, will produce one-fourth as much income per acre as will a good apple orchard.

As fruit has become cheaper on account of the increased supply, a large and constantly increasing European export has sprung up, which affords highly remunerative prices for the best selected specimens of our orchards, while the process of "evaporation" of fruit has become a recognized auxiliary to the horticulture of the land.

If apples are planted at the rate of fifty trees per acre, rows of peach trees can be planted between the apples, which, growing more quickly than the apple trees, soon protect them from the winds, and thus are a great benefit to them. After eight or ten years of productiveness, as the space is needed for apples, the peach trees may be removed, leaving the orchard better for the protection, and at the same time having yielded the planter a large return for his trouble.

Our list embraces a most careful selection of the best sorts for the several seasons, and few, if any, are omitted, that have proved worthy of general culture.

#### DWARF APPLES.

Where space is limited, dwarf apples may be advantageously planted. Of these we grow a limited number of the best varieties.

#### SUMMER APPLES.

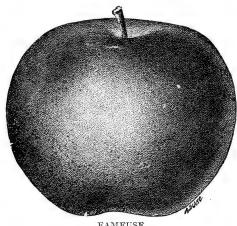
- Caroline Red June—A popular variety for the South and West; small to medium; deep red; productive, hardy and a free grower. June and July.
- Early Harvest—Medium size, round, straw color; tender, sub-acid and fine; productive. July and August.
- Early Strawberry—Medium, roundish; handsomely striped with red; excellent; productive. July and August.
- Red Astrachan—Large, roundish, nearly covered with deep crimson, overspread with a thick bloom; juicy, rich, acid; a good bearer. July and August.
- Sweet Bough—Large; pale greenish yellow; tender and sweet; good bearer. July and August.
- Tetofsky—A handsome Russian apple, very hardy and productive; an early bearer; fruit medium to large; yellow, striped with red; acid flavor. July and August.
- Yellow Transparent—A very early Russian apple of good quality and decided merit; color when ripe, pale yellow; quality good. July and August.

#### AUTUMN VARIETIES.

Alexander (Russian origin)—Very large; deep red or crimson; medium quality. Oct.

Autumn Strawberry - Medium; streaked; tender, juicy, sub-acid, fine. Vigorous and productive. September and October.

Duchess of Oldenburg-Russian; medium to large size; skin yellow, streaked with red, and somewhat blushed, sometimes with a faint blue bloom; flesh juicy and good, with a rich, sub-acid flavor; productive. September.



FAMEUSE.

- Fall Pippin (Pound Pippin)—Very large, yellow; tender, juicy and rich; fine in all localities. Tree vigorous. September and Octo-
  - Fameuse (Snow Apple)—Medium size; roundish; very handsome; deep crimson; flesh snowy white, tender, juicy, high flavored and delicious; tree vigorous, productive and very hardy. October and November.
  - Gravenstein Large, striped and beautiful; tender, juicy and high flavored; productive. September and October.
  - Haas (Gros Pommier, Fall Queen) -Medium size; pale greenish yellow, shaded and striped with red; tender, juicy, sub-acid.

Tree vigorous and very hardy; upright grower; bears early and abundantly. September to November.

Jersey Sweet—Medium; striped red and green; very sweet, rich and pleasant. Good grower and bearer. August to October.

Maiden's Blush - Medium size, flat, quite smooth and fair; pale yellow, with beautiful red cheek; tender, sprightly, pleasant acid flavor. Fair grower and good bearer. August to October.

Pumpkin Sweet (Pumpkin Russet, Pound Sweet)—A very large, round, yellowish russet apple, very sweet and rich. Tree a vigorous, rapid, upright grower; valuable. September to November.

Rambo-Medium size, flat, yellowish white in the shade, streaked and splashed with pale red in the sun; flesh greenish white, very tender, rich and mild. Not suitable for all sections. October to December.

Red Bietigheimer-A rare German variety. Fruit large to very large; skin pale green color, mostly covered with purplish crimson; flesh white, firm, sub-acid, with a brisk pleasant flavor. Tree a free grower and an abundant bearer. This is one of the largest and handsomest of apples. September and October.

Rolfe—Originated in Guilford Center, Me., where it is grown very extensively and regarded as perfectly hardy. A good bearer and of fine quality. Sub-acid and very small core; excellent for cooking or the table, and classed as one of the most attractive and best selling varieties. October to December.

St. Lawrence—Large; vellowish, striped and splashed with carmine; flesh white, lightly stained, crisp, juicy, tender and vinous. Tree hardy and productive. September and October.

Sherwood's Favorite, or Chenango Strawberry—Medium size, oblong, and indistinctly ribbed; of a light color, splashed with dark crimson; flesh white, juicy, very mild and tender, slightly sub-acid, good. August and September.



WALTER PEASE.

Walter Pease—This large and handsome deep red fall apple, introduced in 1895, readily attracts the attention of buyers by its size and color. The son of Walter Pease says concerning it: "My father had a large apple orchard of native fruit. mostly very old trees, and when one went down another was set in its place. I am over 70 years old and when I was about 10 years old this small tree first came into bearing and the Shakers were the first to get scions from that tree. As soon as it became known, every one came for them, and such was the call for them that the tree was injured by being cut away and father refused to part with more for some years. The original tree succumbed to old age 6 or 7 years ago." The trees are well formed and unusually stocky. The fruit is large with red and yellow stripes, mild, juicy, slightly sub-acid, rich and aromatic, and although it ripens by September 1st, it may be kept until midwinter. As it can be placed on fruit stands in early fall, and tastes as fine as it looks, this variety would appear to be a most desirable one to set where fruit is sold in local markets. It is certainly a desirable variety to set a few trees of for trial purposes.

#### WINTER.

Arkansas Black—Originated in Northwest Arkansas, and is an enlarged and improved Winesap. Fruit almost black; flesh firm, rich, crisp, with a rich, high flavor. November to February.

Bailey Sweet—Large; deep red; tender, rich, sweet. Vigorous, upright, good bearer. November to April.

Baldwin—Large, roundish; deep bright red; juicy, crisp, sub-acid, good flavor. Tree vigorous, upright, and very productive of fair, handsome fruit. In sections where it thrives, one of the best and most popular winter apples. January to April.

Baxter—Originated in Canada. Fruit uniformly large, handsome, delicious, mild acid. Tree extremely hardy, vigorous and productive. December to May.

- Belle de Boskoop—Pronounced one of the most beautiful and profitable of the Russian varieties. Large; bright yellow, washed with light red on the sunny side, and sometimes with a sprinkling of russet; flesh crisp, firm, juicy, sprightly subacid; quality very good. February to April.
- Bellefleur (Yellow Bellflower)—Large, irregularly oblong; rich yellow color; flesh tender, juicy, crisp, with a very sprightly flavor; tree a moderate grower. November to March.
- Ben Davis (New York Pippin, Kentucky Streak, etc.)—Large, handsome, striped and of good quality; productive; a late keeper; highly esteemed in the West and Southwest. December to March.
- Bismarck—Originated in New Zealand, showing wonderful productiveness and early fruiting. A stocky grower, making a small, low tree, which sends out fruiting spurs and buds at a very early age. A large, handsome apple, of greenish yellow ground overspread and streaked with crimson and carmine; excellent for cooking. October to January.
- Bottle Greening—Resembles Rhode Island Greening in size and flavor, but tree is a better grower and much hardier. A native of Vermont. December to March.
- Cooper's Market—Medium, conical; yellow, striped with crimson; flesh white, tender, brisk, sub-acid; vigorous, upright grower. December to May.
- Delaware Winter—Closely resembling and perhaps identical with Lawver; large, bright red; flesh crisp, juicy, rich, sub-acid. This variety is highly recommended for its admirable keeping qualities, having been preserved into August (ten months). January to July.
- English Russet—Medium: pale yellow, nearly covered with russet; firm and crisp, with a mild sub-acid flavor; very valuable on account of its long-keeping properties; tree a very upright and vigorous grower; produces enormous crops. Very desirable; keeps till June.
- Fallawater—Very large; roundish; yellow, with generally a red cheek; mild sub-acid; a popular Pennsylvania apple. October to February.
- Gano—Originated in Missouri. Form conical, good size and smooth; deep red, shaded on the sunny side to mahogany, very attractive; flesh pale yellow, fine grained, tender, pleasant, mild sub-acid; is a good shipper and keeper. Tree healthy, vigorous and hardy; an annual and prolific bearer. January to May.
- Gideon—Raised in Minnesota. An upright grower; medium to large; color yellow, with vermilion blush on sunny side; mild acid; quality very good. December to March.
- Golden Russet—Medium size; dull russet with a tinge of red on exposed side; flesh generally crisp, juicy and high flavored. Tree a vigorous grower and a great bearer. Very popular. November to April.
- Greenville—A seedling of Maiden's Blush, which it resembles in quality, size and productiveness. Originated in 1874, it has proven healthy, free growing and a productive annual bearer, being largely planted for commercial orchards. Fruit light waxen yellow with red cheek; flesh crisp, tender, juicy, with mild sub-acid flavor. December to April.
- Grimes' Golden—Medium; rich golden yellow; flesh crisp, tender, juicy with a peculiar aroma; tree a good grower and early bearer; origin, Virginia. Dec. to April.
- Hubbardston Nonsuch—Large, striped yellow and red; tender, juicy and fine; strong grower and good bearer. October to April.
- Jacob's Sweet—A large, handsome, showy apple originating near Boston, Mass. Almost round, greenish yellow with red cheek. Excellent quality and good keeper. Strong grower and heavy bearer. One of the best sweet apples. December to January
- Jonathan—Medium size; deep red; flesh tender, juicy and rich; very productive. One of the very best varieties for the table, cooking or market. November to March.

- King (Tompkins County)—Large and handsome; striped red and yellow; tree vigorous and productive; one of the best. November to May.
- Lady—A beautiful little dessert fruit; flat; pale yellow, with a deep red cheek; juicy, rich and pleasant. November to May.
- Longfield—A Russian variety. Tree a free, upright grower; an early and abundant bearer. Medium to large; yellow, with a flush on the sunny side like the Maiden's Blush; rich, sprightly, sub-acid; quality good. December to March.
- Mammoth Black Twig—One of the most profitable and valuable for market. Resembles Winesap except that it is from a third to a half larger. Dec. to April,
- Mann—An upright grower, forming a round head; fruit medium to large; roundish oblate; skin deep yellow when fully ripe, with sometimes a shade of brownish-red where exposed; flesh yellowish, juicy, mild, pleasant sub-acid; good to very good. January to June.
- McIntosh Red—An exceedingly valuable, hardy, Canada sort. Medium size; nearly covered with dark red; flesh white, fine, very tender, juicy, and refreshing. A good annual bearer of fair handsome fruit. Resembles the Fameuse, but larger and more hardy and fully equal in quality to this standard sort. October to February.
- Monmouth Pippin (Red Cheek Pippin)—Large; greenish yellow, with a fine red cheek; juicy, tender and good. Tree erect, vigorous and productive. December to April.
- Newtown Pippin—One of the very best apples; high quality. Very juicy, crisp and of delicious flavor; requires high culture for the best fruit; fine keeper. December to May.
- Northern Spy—Large, roundish, slightly conical, somewhat ribbed; striped, with the sunny side nearly covered with purplish-red; flesh white and tender, with a mild sub-acid, rich and delicious flavor. The trees should be kept open by pruning, so as to admit the air and light freely. January to June.
- North Star (Dudley's Winter, Winter Duchess)—Originated in Maine. Tree thrifty, perfectly hardy; a good cropper. Fruit, size and appearance of Duchess, but more solid and richer flavor; keeps until spring. A very great acquisition.
- Northwestern Greening—Greenish yellow, good size, fine quality. Hardy. December to April.
- Peter—Origin Wealthy seed, and in form, size and color an exact duplicate of the parent, but differing in flavor and season, keeping from four to six weeks longer. The tree is perfectly hardy. November to March.
- Pewaukee—A seedling from Duchess of Oldenburg. Fruit medium to large, surface bright yellow, partially covered with dull red; flesh yellowish-white, crisp, juicy; flavor sub-acid, rich, aromatic, spicy, something like the Jonathan; quality good. Tree strong grower and very hardy. December to May.
- Plumb's Cider—A native of Wisconsin, where its hardiness has been abundantly proven. Tree vigorous, round-headed and productive; flesh white, fine, tender, juicy, mild sub-acid. September to January.
- Peck's Pleasant—Large; pale yellow; very tender and rich, with a Newtown Pippin flavor; fine bearer. November to March.
- Rhode Island Greening—Large, roundish; light greenish yellow; tender, rich and juicy; a crooked but vigorous grower. November to March.
- Rawle's Janet (Never Fail)—Medium, roundish, ovate; greenish yellow, striped with red; crisp, rich and juicy; one of the best and longest keepers in the South and Southwest. January to April.
- Rome Beauty—Large, yellow, with red cheek, handsome; good quality; moderate grower. Great bearer. December to May.

- Roxbury Russet (Boston Russet)—Rather large; greenish yellow, mostly covered with bright russet; a pleasant sub-acid flavor. January to June.
- Salome—Tree a strong grower; equals Wealthy in hardiness; an early and annual bearer; fruit of medium and uniform size; quality very good, which it retains even into the summer; keeps well with ordinary care until July.
- Seek-no-Further (Westfield)—Medium to large; slightly russeted, with dull red stripes; tender, rich, spicy and fine; good bearer. November to February.
- Smith's Cider—A handsome fruit, large, oblong, somewhat flattened; skin yellow, changing to red; flesh tender, juicy, crisp, with pleasant sub-acid flavor. December to March.
- Spitzenberg, Esopus—Medium to large; deep red; flesh yellow, crisp, sub-acid, high flavored. Bears and grows well transplanted in rich soil. November to April.
- Stark—Esteemed as a long keeper and valuable market fruit. Fruit large, roundish; skin greenish yellow. much shaded with light and dark red, and sprinkled with brown dots; flesh yellowish, juicy and mild sub-acid. January to May.
- Sutton Beauty—Fruit large, waxy yellow, striped with crimson; flesh white, tender, juicy, mild acid; quality good and a remarkable keeper. Tree vigorous, a handsome grower, very productive. One of the most valuable market sorts. October to February.
- Tolman Sweet—Medium; pale yellow, slightly tinged with red; firm, rich and very sweet; the most valuable baking apple; productive. November to April.
- Twenty Ounce (Cayuga Red Streak)—Very large, nearly round; yellow, striped with red, quality good. Vigorous and good bearer. Popular as a market variety. October to January.
- Wagener—Medium to large; deep red in the sun; flesh firm, sub-acid and excellent; very productive; bears very young. November to February.
- Walbridge—A handsomely striped, medium-sized apple of good quality; very hardy. February to May.
- Wealthy—Originated in Minnesota. Hardy, vigorous and very productive. Fruit large, oblate, skin smooth, whitish yellow, shaded with deep red in the sun, splashed and spotted in the shade. Flesh white, fine, tender, juicy, lively subacid; very good. Doing well in nearly all sections, one of the most desirable late Fall and early Winter varieties. October to February.
- Winesap—Medium; dark red; sub-acid, excellent. Tree a moderate grower and abundant bearer. A favorite market variety in the West. November to May.
- Wolf River—A beautiful fruit of the very largest size. Originated near Wolf River, Wisconsin, and may well be classed among the iron-clads. Skin greenish yellow, shaded with crimson; flesh white, juicy, tender, with a peculiar, pleasant, mild sub-acid flavor. Tree a strong, stout grower and great bearer. January and February.
- York Imperial Of medium size, truncated, oval, angular; skin greenish yellow; flesh tender, crisp, aromatic. Highly esteemed. November to January.

#### EXTRA HARDY, OR IRON-CLAD APPLES.

The opinion has prevailed that the attempt to produce valuable apples in the northern sections of New York, New England, and the adjoining portions of Canada, Wisconsin, Minnesota, and other sections unfavorable for general fruit growing, must prove a failure. While this is true as to many varieties successfully grown in more temperate or favorable regions, its general application is quite erroneous. Experience in growing Russian, or other varieties of northern origin, has shown that a limited variety of fine apples can be grown as far north as Montreal, and that some of these varieties may be planted with equal profit in all sections. North and South.

Below we give a list of the most valuable extra hardy apples:

SUMMER.
Tetofsky.
Vellow Transpare

Yellow Transparent.

AUTUMN.
Alexander.

Duchess of Oldenburg.

Fameuse.

Red Bietigheimer.

St. Lawrence.

WINTER.

Arkansas Beauty.

Baxter.

Belle de Boskoop. Delaware Red.

Gano.

Gideon.

Grimes' Golden.

Longfield.

Mann.

McIntosh Red. Peter.

Pewaukee.

Salome.

Walbridge.

Wealthy.

Wolf River.

#### SELECT CRAB APPLES.

As an ornamental fruit, and for jellies, preserving, etc., the Crab Apple is unequaled. All are very hardy and prolific, come into bearing when very young, and command a ready and profitable market. We name the best sorts.

Excelsior—Raised from seed of Wealthy, in Minnesota. Very hardy, productive, and one of the best flavored varieties. This is also a good eating apple. September.

Gen. Grant—Large, round; yellow, striped with dark, almost black, red on sunny side; flesh white, fine grained, mild sub-acid. October.

Hyslop—Large, roundish-ovate; dark red, with a blue bloom; flesh yellowish; excellent for cider; tree hardy. October to December.

Martha—Immensely vigorous, hardy, producing every year. Mr. Gideon says: "For sauce it surpasses any apple we ever grew." A great acquisition. Oct.

Red Siberian—About an inch in diameter, grows in clusters; yellow, lively scarlet cheek; bears young and abundantly. September and October.

Transcendent—Tree immensely productive, bearing after second year, and producing good crops by the fourth season. Fruit from one and a half to two inches in diameter, being large enough to quarter and core for preserving and drying. Excellent for sauce and pies, both green and dried. The best of its class for cider and all other purposes, being juicy and crisp. Skin yellow, striped with red. September and October.

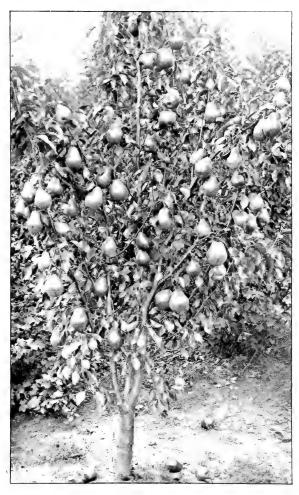
Van Wyck—Large; skin mottled with bright red; sweet. Tree vigorous. October and November.

Whitney's Seedling—Large; splashed with carmine; flesh firm, juicy and rich. A great bearer and *very* hardy. Tree a vigorous, handsome grower. Has no superior, if an equal. August.

Yellow Siberian—Nearly as large as the Red Siberian; fine amber or golden-yellow color. September and October.

#### PEARS.

Standard Pears prefer a strong loam, but succeed well in a great variety of soils, and upon almost any land that will produce good crops of vegetables or grain.



DWARF DUCHESS.

Pears will keep longer and their flavor be greatly improved by picking before they are quite mature, and ripening them in the house. By a judicious selection of varieties their season can be extended from July to February.

Dwarf Pears are suited to garden culture, or where space is limited. Can be planted 8 or 10 feet apart, and deep enough to cover the union of the stock and scion, and be trained low by proper shortening of the terminal branches. These conditions being observed, they will be found very satisfactory, though we urge, where space is ample, that Standard trees be planted.

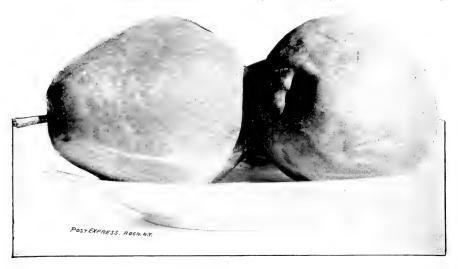
The letters "D" and "S" appended to the description of varieties, indicate favorable growth, either as "Dwarfs" or "Standard," or both. Those designated as "moderate growers" are usually smaller trees.

#### SUMMER VARIETIES.

Bartlett—Large size, with often a beautiful blush next the sun; buttery, very juicy and high flavored; bears early and abundantly; very popular. D. and S. Aug. and Sept.

Clapp's Favorite—Large size; pale lemon yellow; flesh fine grained, juicy, melting, rich and buttery; a cross between Bartlett and Flemish Beauty; earlier than Bartlett and resembling the Flemish Beauty in growth. It is equally hardy with Flemish Beauty; a good grower and productive. In season during August and September. Care should be taken to pick the fruit at least ten days before it would ripen upon the tree. August and September. D. and S.

Doyenne d'Ete—Small size; yellow, with a blush on sunny side; melting and sweet, with pleasant flavor; tree a strong grower and very productive. In season during August. D. and S.



BEURRE D'ANJOU.

Lawson, or Comet—Tree is a vigorous, upright grower and productive; foliage clean and healthy; fruit good size, yellow, flushed with the most beautiful crimson; flesh crisp and juicy; a firm, good shipper. August. S.

Le Conte—Tree very vigorous and productive; fruit large; skin smooth, pale yellow; quality poor; ripens later than Bartlett. Worthless when grown north of Georgia. S.

Margaret (Petite Marguerite)—Medium size; skin greenish yellow, with brownish red cheek; flesh fine, melting, juicy, vinous and of first quality; tree a vigorous, upright grower, and an early and abundant bearer. Ripens latter part of August. D. and S.

Osband's Summer—Medium size, inclining to round; juicy and melting, with a rich, sugary flavor, and often slightly perfumed; tree moderately vigorous, an erect grower, and very productive. In season during August. D. and S.

Souvenir du Congress—A remarkably fine variety of very large size and most showy appearance. August and September. S.

Tyson—Above medium size; deep yellow at full maturity, slightly russet, with a crimson cheek; melting, juicy and fine flavored; a vigorous and rapid grower. One of the finest summer varieties. In season during August. D. and S.

Wilder—Small to medium; greenish yellow, with red cheek; handsome, sweet, delicious. July and August. D. and S.

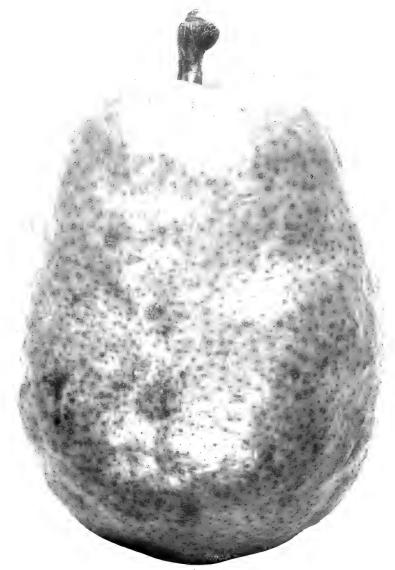
#### AUTUMN.

Anjou (Beurre d'Anjou)—A large, handsome pear; buttery and melting, with sprightly, vinous flavor; tree a vigorous grower and good bearer. We have no hesitation in pronouncing it to be the most valuable pear in the catalogue. Does equally well as a standard or dwarf. Keeps until the winter holidays, when it commands very high prices in market. D. and S.

Bartlett-Seckel—Seedling from Bartlett and Seckel. New and highly prized by good judges. September to October. S.

Beurre Bosc—A large and beautiful russety pear; very distinct, with a long neck; high flavored and delicious; a *moderate* grower and rather irregular; bears well. Top graft in order to obtain good standard trees. September and October. S.

Beurre Clairgeau—Its size, early bearing, productiveness and beauty render it a profitable market variety. Very large; light yellow, shaded with crimson and russet; an early and abundant bearer. Keeps sound a long time after being gathered. November to January. D. and S.



DUCHESS D'ANGOULEME.

Duchess d'Angouleme—Very large, with rough and uneven surface; of a greenish yellow, with patches of yellow and a dull red cheek; a vigorous and strong grower and a good bearer while quite young. It attains its greatest perfection grown as a dwarf. In season during October and November. D.

Flemish Beauty—Large size; greenish yellow and brown; rich and juicy. An old and highly esteemed variety; a strong grower and a great bearer; hardy and desirable. In season during September and October. S.

Howell—Large size; light waxen yellow: sweet and melting; excellent quality; a strong and hardy grower and good bearer. Season September and October. D. and S.

- Kieffer's Hybrid—The tree is a vigorous grower, an early and regular bearer and very productive; fruit large, rich yellow, tinged with red, somewhat russety and very handsome; flesh white, buttery and juicy. A good canning pear. October. D. and S.
- Louise Bonne de Jersey—Large size, oblong pyriform; pale green in the shade but overspread with brownish red in the sun; very juicy and melting with a rich and excellent flavor; succeeds better on the Quince than on the Pear root. In season during September and October. D. and S.
- Seckel—Small size; yellowish russet, with red cheek; flesh whitish, buttery, very juicy and melting. The richest and finest variety known and extensively planted all over the country. A prolific bearer. September and October. S.
- Sheldon—Large size: roundish; greenish yellow, mostly covered with thin light russet; very juicy, melting, sweet and vinous; a fine grower and good bearer, but must be double worked on the Quince. October and November. S.
- Vermont Beauty—A beautiful new seedling pear that originated in Northern Vermont. Fruit of medium size; flesh melting, sprightly and of the best quality; tree healthy, hardy and very productive. October. S.
- Worden-Seckel—A seedling of the Seckel, which it much resembles in flavor; is equally as luscious. more juicy, with an aroma fully as rich and inviting, while in size, form, color and appearance it is far superior to its parent. Color, bright red on one side and light golden yellow on the other. Very hardy; bears young, and is an enormous producer; ripens just after Seckel; a splendid keeper. D. and S.

#### WINTER.

- Easter Beurre—Large size; yellow, with brownish red cheek; of excellent quality, rich and melting. A moderate grower and productive. Keeps all winter. Succeeds best on the Quince root. D.
- Lawrence—Above medium size, yellow, tender and melting; quality best; one of the best Winter pears. In season during midwinter. D. and S.
- Lincoln Coreless—Originated in Tennessee and much prized by all who have fruited it. Tree healthy and vigorous; an annual and abundant bearer. Fruit large, yellowish green, slightly bronzed; red on one side; season, midwinter; coreless. D. and S.
- President Drouard—A variety recently introduced from France, highly recommended for its rich flavor and great keeping qualities. Tree a vigorous grower. Fruit large and handsome; melting and juicy. March to May. S.
- Vicar of Winkfield—Large size, long, fine; rich yellow when fully ripe. Very vigorous and productive; one of the best. November to January. D. and S.
- Winter Nelis Medium size; greenish yellow, spotted with russet; melting and buttery with rich sprightly flavor. Tree of straggling growth; must be top grafted to obtain good trees. December and January. S.

Gathering Pears—One of the most important points in the management of Pears, is to gather them at the proper time. Summer Pears should be gathered at least ten days before they are ripe, and Autumn Pears at least a fortnight. Winter varieties, if they will hang so long, may be left until the leaves begin to fall.

Thin the Fruit—We cannot urge too strongly the following suggestion: When pear trees are heavily laden, the fruit should be thinned when about *one-third* grown, else the fruit will be poor and the trees injured.

#### SELECT CHERRIES.

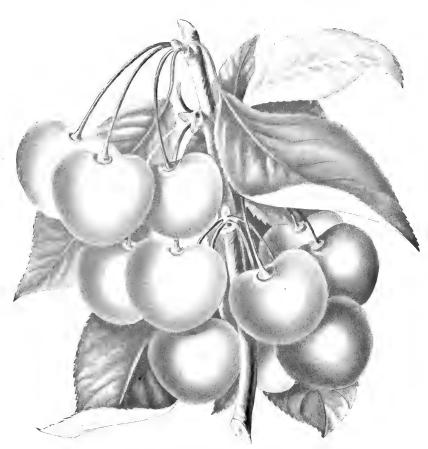
The Cherry thrives best on a sandy or gravelly soil, and there attains its highest perfection, but will do very well in almost any situation except a wet one. It is one of the most ornamental of all fruit trees which, with its delicious and refreshing fruit, makes it very desirable for planting near the dwelling, where beauty and shade, as well as fruit, are so desirable.

We divide them into two classes, Hearts and Bigarreaus, and Dukes and Morellos. The first being strong and vigorous growers, making large, open, spreading heads or tops, are best suited for the purpose of shade, and produce large, heart-shaped, sweet fruit. The Dukes and Morellos are all of slower growth, and do not ever attain so large a size, and are more hardy, less liable to get injured by bursting the bark, and generally produce acid fruits. Two year old trees are the most desirable for transplanting, and are usually from four to six feet high.

#### HEART AND BIGARREAU CHERRIES.

Fruit heart-shaped, with tender, sweet flesh. Tree of rapid growth, with large, soft, drooping leaves.

- Black Eagle—Large; black; tender, rich, juicy and high flavored. Tree a moderate grower and productive. Ripe beginning of July.
- Black Heart (Black Ox Heart)—A very old variety. Fruit medium size, heart-shaped, rather irregular; skin glossy, deep black: flesh tender, juicy, sweet. Tree a rapid grower, hardy and productive. Early in July.
- Black Russian—European origin. Fruit large; deep black, glossy; flesh very solid and firm, yet juicy and delicious. The most valuable late sweet cherry. Last of July.
- Black Tartarian—Very large; purplish black; half tender; flavor mild and pleasant. Tree a remarkably vigorous, erect and beautiful grower, and an immense bearer. Ripe last of June and beginning of July. One of the most popular varieties in all parts of the country.
- Centennial—A new variety from California. Remarkable for its firmness and splendid shipping and keeping qualities. Very large; amber, shaded with red; sweet, rich and luscious. Tree a straight and handsome grower. July.
- Gov. Wood—The finest of Dr. Kirtland's seedlings; clear, light red; tender and delicious. Tree a vigorous grower and most productive. Hangs well on the tree. End of June.
- Mercer (New)—A remarkable Cherry, which is destined to become very popular. Tree a good grower, very hardy and profuse bearer. Fruit dark red, larger than Black Tartarian, and much finer flavor. Highly recommended. End of June.
- Napolean Bigarreau—Fruit of the largest size; pale yellow, with a bright red cheek; flesh very firm, juicy, and when fully ripe of excellent flavor; tree vigorous and productive. Ripens early in July.
- Rockport—Fruit large, obtuse heart-shaped; skin pale amber, light red in the sun; flesh rather firm, sweet and excellent. Tree vigorous, erect, and produces well. Early in July.



WINDSOR.

Schmidt's Bigarreau—A most promising Cherry; fruit of immense size, of a rich deep black; flesh dark, firm, very juicy, with a fine flavor; bears abundantly, and makes a most noble dish for the table. July.

Tradescant's Black (Elkhorn)—Very large; black; very firm, juicy and good. Tree vigorous and upright, with peculiar gray bark. A great bearer, and so late as to be very valuable. Middle to last of July.

Windsor (New)—A seedling originated at Windsor, Canada. Fruit large; liver-colored, resembling the Elkhorn or Tradescant's Black Heart, nevertheless quite distinct; ripens three or four days after that variety; flesh firm and of fine quality Tree hardy and very prolific. A valuable late variety for market and for family use. Last of July.

Yellow Spanish—Large; pale yellow, with a bright red cheek in the sun; flesh firm, juicy and delicious; one of the best, most beautiful and popular of all light-colored cherries. Tree erect, vigorous and productive. End of June.

#### DUKE AND MORELLO CHERRIES.

These two classes of cherries are very distinct from the preceding. The trees are of smaller size, and grow more slowly; the leaves are thicker and more erect, and of a deeper green. The fruit is generally round, and in color varies from a light red to dark brown.

The Dukes have stout, erect branches usually, and some of them, like Reine Hortense, quite sweet fruit; the Morellos have slender, spreading branches, and acid fruit invariably. These two classes are peculiarly appropriate for dwarfs and pyramids, on the Mahaleb stock, and their hardiness renders them well worthy of attention in localities where the Heart and Bigarreau are too tender.

- Dychouse—Partakes of both the Duke and Morello in wood and fruit; a very early and sure bearer; ripens a week before Early Richmond, of better quality and quite as productive. June.
- Early Richmond—An early red, acid cherry; very valuable for cooking early in the season. Ripens through June. Tree a *free* grower, hardy, healthy and very productive. June.
- Empress Eugenie—Large; dark red; flesh juicy, rich. Tree robust and moderately productive. July.
- English Morello Large; dark red; nearly black; tender, juicy, acid, rich. Tree dwarf and slender; makes a fine bush on the Mahaleb. If trained on a north wall it may be in use all the month of August. Valuable. July.
- Large Montmorency—Tree very hardy and an immense bearer; commences to fruit while young, and is loaded annually thereafter with fine crops. Fruit very large, fine flavor, and of bright, clear, shining red; valuable everywhere; a week later than Early Richmond. The finest acid cherry. Last of June.
- Late Duke—This fine cherry should be in every collection. Fruit large, obtuse heart-shaped, rich dark red color; tender, juicy, sub-acid. Last of July.
- Lieb—A new Morello variety from Northern Illinois: resembles Early Richmond, but a little later, and much prized in the Northwest for its large size and extreme hardiness. Last of June.
- Louis Phillippe—Extra hardy: a vigorous grower and very productive: large size; rich dark red; flesh red, tender, juicy, with mild sub-acid flavor. July.
- May Duke—Au old, well known, excellent variety; large; dark red; juicy, sub-acid, rich. Tree hardy, vigorous and fruitful; ripens over a long period; fine for dwarfs and pyramids. Middle of June.
- Olivet—This variety is of the greatest value. Fruit large; flesh red, with rose-colored juice, tender, rich and vinous, with mild sub-acid flavor. As productive as the best of the Duke sorts, and probably the largest of this class. June.
- Ostheim, or Russian Cherry—A hardy cherry, imported from the nurseries of Dr. Regel, of St. Petersburg, Russia. It has been tested in the severest winters of Minnesota, and found to be perfectly hardy. Charles Downing thus describes it: "Fruit large, roundish, obovate, flesh liver color, tender, juicy, almost sweet, sub-acid; very good." Season middle of July. Morello class.
- Reine Hortense—A French cherry of great excellence: large, bright red; tender, juicy, nearly sweet, and delicious. Tree vigorous and bears well; makes a beautiful pyramid. July.

### SELECT PLUMS.

The Plum attains its greatest perfection on a strong, clay soil, where it grows the most thriftily, and suffers the least from the "curculio" and "black knot" and, as is the case with all other fruits, it is greatly benefited by thorough cultivation.

There is no difficulty in protecting the crop of Plums from the attacks of the curculio by giving it a little extra care. This should be done as follows: Immediately after the trees have done blossoming, and when the fruit is in its first stages of growth, make the ground clean and smooth under each tree, and spread a sheet upon it, so that it will extend as far as the outside edge of the outer branches, and then suddenly jar the tree so as to shake down all the stung fruit and insects, which

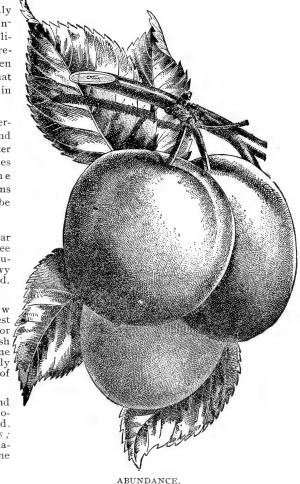
should be destroyed. If this operation be carried on daily for a short time, it will insure a full crop of this delicious fruit, and will well repay the daily attention given it. It is very important that this should be done early in the morning.

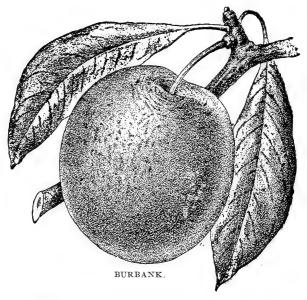
Standard trees are generally from 4 to 6 feet, and should be encouraged after planting to form branches low down, or near the ground, and by this means low-headed trees will be secured.

Abundance — The popular new Japanese plum. Tree thrifty, hardy and beau-tiful; fruit large, showy and good, richly perfumed. First of August.

Beauty of Naples-A new variety of the highest promise; size large; color greenish yellow: flesh firm, juicy and very fine flavored. Tree very hardy and prolific. Middle of September.

Bradshaw-A very large and fine early plum; dark violet red; juicy and good. Tree erect and vigorous; very productive. Valuable for market and home use. August.





Burbank — The largest, handsomest and best of the wonderful new Japanese plums. Tree thrifty, free from black knot and other diseases, and perfectly hardy. Fruit is not attacked by the curculio and ripens just after Abundance. A very great acquisition. Last of Aug. or first of Sept.

Coe's Golden Drop—Large and handsome, oval; light yellow; flesh firm, rich and sweet; adheres to the stone. Tree a moderate grower and very productive. Valuable not only on account of its large size and fine appearance, but its lateness. Last of September.

Fellemberg (French or Italian Prune)—A fine late plum; oval; purple; flesh juicy and delicious; parts from stone; fine for drying. Tree a free grower and very productive. September.

German Prune—Medium; oval; purple or blue; rich, juicy, fine. Tree vigorous and very productive. September.

Giant Prune (California)—The largest prune known, the fruit averaging 1½ to 2 ounces each. Its unequaled size, handsome appearance, rare keeping qualities, great productiveness and high quality place it at the head of the prunes for home use or market. September.

Grand Duke (New)—A valuable addition to late plums; as large as the Bradshaw, of same color, and ripening latter part of September. Entirely free from rot.

Green Gage—Small, but of the highest excellence. Tree a *moderate* grower. Should be top grafted to get good trees. September.

Gueii—Fruit very large; deep bluish purple; covered with thick bloom; flesh yellowish green, coarse, sweet and pleasant. Great bearer and very early; tree a hardy and rapid grower. This new variety is regarded as very valuable for market by growers along the Hudson River. First to middle of September.

Hale—The most vigorous of all the Japans; an upright, compact grower, that requires an annual thinning out of head for best results. Fruit large, bright orange, mottled with cherry red; superb quality, fully equal to Imperial Gage. September.

Imperial Gage—Rather large; oval; greenish; flesh juicy, rich and delicious; parts from the stone. Tree a vigorous grower; very productive and one of the best of plums. Middle of August.

Jefferson—A fine variety; yellow, with a red cheek; flesh orange colored, juicy and rich; parts from the stone. Tree a slow, poor grower, but productive. End of August.

Lombard—Medium size; oval; violet red; flesh yellow, juicy and pleasant. Tree very vigorous, a great bearer, and peculiarly well adapted to light soils. September.

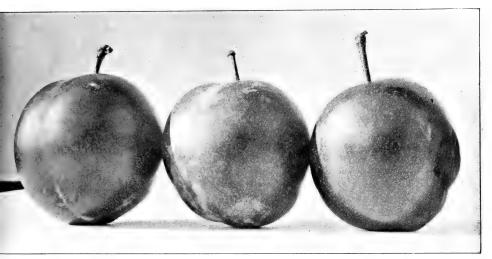
Monarch—The largest size, even larger than Grand Duke: brilliant bluish purple. Free from rot and disease, and of extra good quality. One of the very best for home or market. Last of September.

Mooer's Arctic—Size medium or below; skin purplish black, with a thin blue bloom; flesh greenish yellow, juicy, sweet and of pleasant flavor. Charles Downing speaks of it as follows: "A new, hardy plum, which originated on the bigh lands of Aroostook county, Maine, where unprotected and exposed to cold, it has for many years borne enormous crops, and is claimed to be the hardiest plum grown, and so far free from black knot. Tree healthy, vigorous; an early and abundant bearer." September.

Niagara — Of extra large size and first rate flavor; color dark blue. Good bearer; not liable to rot. Ripens about August 1st. We regard it as one of the best new varieties.

**Ogon**—Above medium, round, clear lemon yellow with light bloom; flesh meaty and firm; a long keeper; excellent for canning; freestone. Early August.

Pond's Seedling, or Font Hill A magnificent English plum; form of Magnum Bonum; light red, changing to violet; flesh rather coarse. Tree a *vigorous* grower and most abundant bearer. One of the most attractive in cultivation. September.



#### SHIPPER'S PRIDE.

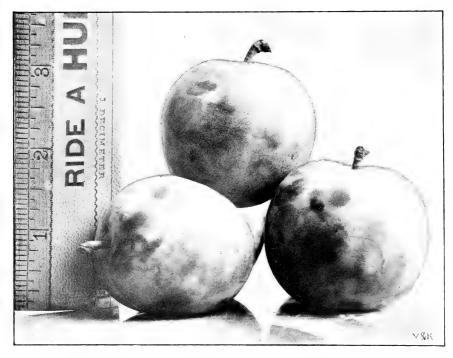
Prince Englebert—Very large and long; deep purple; rich, excellent. One of the best. End of August.

Prunus Simoni—A distinct species from China. Growth erect, flowers small, white, appearing early in spring; fruit large, flattened, of the size and appearance of a Nectarine, and of a brick-red color; flesh yellow, with a peculiar aromatic flavor. September.

Red June—Prof. Bailey, of Cornell, says: "By all odds the best Japanese plum." Ripens before Abundance; fruit good size, brilliant red; finest extra early plum. Last of July or early August.

Satsuma—One of the celebrated Japanese plums. Fruit large; color reddish purple, with blue bloom; flesh blood color; quality fine; pit remarkably small. Perfectly hardy and a vigorous grower. September.

Shipper's Pride—Originated in New York. An unusually thrifty grower, and stands our coldest winters. Very productive, the original tree having never failed to produce a good crop since it was old enough to bear. Fruit of large size and nearly round; color handsome dark purple; quality fine, juicy and sweet; excellent for canning and an unusually good shipper. A splendid market plum. Ripens from first to middle of September.



WICKSON.

- Shropshire Damson—An English variety of great merit for preserving. Large, and much more desirable than the common Damson. Tree vigorous grower, hardy and abundant bearer. October.
- Stanton—Fruit medium size; color dark purple with a beautiful bloom. Very productive. Has been kept two weeks after ripening, with no tendency to decay. As a fine canning fruit it has no superior, and has fine quality as a table fruit. September 15th to October 1st.
- Washington—All things considered, this is one of the finest and most popular plums. Fruit very large, roundish oval; skin yellow, with a slight crimson blush in well ripened specimens; flesh very sweet and luscious. Tree vigorous, with broad, handsome foliage; very productive. Last of August.
- Wickson—Mr. Burbank's greatest seedling; strong, upright grower; very productive; fruit remarkably handsome, deep red, covered with white bloom; stone very small; fruit very large, firm, sugary and delicious. A great acquisition. Sept.
- Weaver—Large, purple, with a blue bloom; very prolific; a constant and regular bearer and of good quality; very hardy, never injuring in even our severest winters. September.
- Yellow Egg (Magnum Bonum, Yellow)—Very large and beautiful; yellow; a little coarse, but excellent for cooking. Vigorous and productive. August.
- Yellow Gage (Prince's Yellow Gage) Fruit large, oval; skin golden yellow; flesh deep yellow, rich, sugary and melting. Tree very vigorous and productive. Middle of August.



### SELECT PEACHES.

The ease with which Peach trees may be cultivated, their comparative freedom from disease, the short period before they become productive, with the immense demand for the fruit and the facilities with which it may be shipped to distant markets, make peach growing extremely profitable.

To secure healthy, vigorous and fruitful trees, the ground must be kept clean and mellow, and it should receive an occasional dressing of wood ashes. It should be remembered that peaches are all borne on wood of the previous season's growth, and that this makes it absolutely necessary to prune the trees yearly, to remove dead branches and let in light and air, and keep the trees in good shape to produce bearing wood. (f) for freestone; (c) for cling; (s-c) for semi-cling.

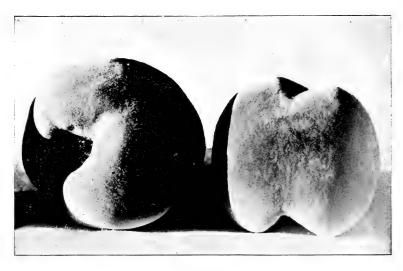
 $\label{eq:Alexander-Medium size} \begin{tabular}{ll} Alexander-Medium size; skin greenish white, nearly covered with rich red; flesh melting, juicy, sweet. Tree vigorous and productive. July. (c.) \\ \end{tabular}$ 

Amsden—Originated at Carthage, Mo., in 1882. Medium size; skin greenish white, nearly covered with purple in the sun; ripens with the Alexander and closely resembles that variety, but some think it a little higher flavored. July.  $(\epsilon_{\cdot})$ 

Barnard's Early --Medium to large; yellow, cheek purplish red; flesh yellow, red at the stone; juicy, sweet and rich. First to middle of September. (f.)

Bokara—The best of Prof. Budd's importations from Bokara, and is said to be the hardiest peach grown. Large size, fine quality and immensely productive. September. (f.)

Carman—A new hardy rot-proof peach, ripening at same time as Early Rivers, yet almost as large and fine as Elberta. Skin pale yellow with blush on sunny side; flesh white, tender, sweet and melting. Ships well. Middle of August. (f.)



CROSBY.

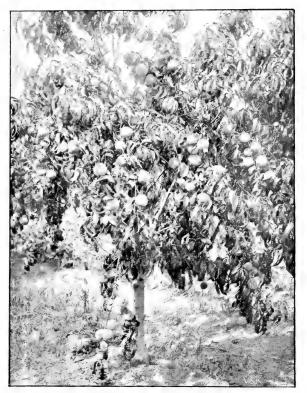
- Champion—Beyond doubt this is the champion early peach of America. Tree and fruit buds extremely hardy—has stood 18° below zero and produced a full crop the following summer. The flavor is delicious, sweet, rich and juicy; skin creamy white with red cheek, strikingly handsome. Hardy, productive; a good shipper. Last of August. (f.)
- Crawford's Early—A magnificent large yellow peach of good quality. Tree vigorous and very productive. Its fine size, beauty and productiveness make it one of the most popular sorts; no other variety has been so extensively planted. First of September. (f.)
- Crawford's Late—Fruit of large size; skin yellow or greenish yellow, with dull red cheek; flesh yellow. Tree vigorous; moderately productive; one of the finest late sorts. Last of September. (f.)
- Crosby—First introduced by Mr. Hale, of Conn., one of the most intelligent, reliable and successful fruit growers in that state. He states that the Crosby has stood 22° below zero without injury to the tree or fruit buds, and in every other respect has proved a remarkably fine peach for home use or market. Ripens just before Crawford's Late. Middle of September. (f.)
- Early Canada—Originated at Jordan, Canada. As early as the earliest. Of good size, fine quality and handsome appearance. Its earliness, hardiness and the fact that the flesh clings but slightly to the stone, create an unusual demand for trees of this variety. July. (c.)
- Early Rivers—Large: color creamy white, with a delicate pink cheek; flesh melting, with a remarkably rich, racy flavor. Larger and ten days later than Alexander. One of the finest of all peaches for home use or near-by market. Middle of August. (s-c.)
- Early York—Medium size; greenish white, colored in the sun with dull red; flesh greenish white, very tender. Middle of August. (f.)
- Elberta—The great market peach of the South and Southwest. It is perfectly hardy at the North, and is confidently believed by the most experienced fruit growers at the North to be one of the very best peaches for home use or the market. September. (f.)

Fitzgerald — Origin Canada. Fully equal to Crawford's Early in size, quality and color, with much smaller pit; a very early bearer, often when two years from bud; extra hardy, succeeding in Canada and in Michigan perfectly; fruit large, brilliant yellow with red cheek; highest quality; ripens after Crawford's Early. (f.)

Foster—Originated near Boston, Mass. Large: deep orange red, becoming very dark on sunny side: flesh yellow, very rich and juicy, with sub-acid flavor. Sept. (f.)

Garfield—A good yellow peach; valuable, hardy and productive. Sept. (f.)

Globe—A rapid, vigorous grower, and an enormous bearer. Fruit very large, globular in form; flesh firm, juicy.



FITZGERALD.

yellow, shaded with reddish crimson toward the pit or stone; quality good; very rich and luscious. September. (f.)

Greensboro—The largest and most beautifully colored of the extra early peaches; double the size of Amsden's June; ripens with Early Rivers; flesh white, juicy and excellent. (s-c.)

Hale's Early—Medium size; greenish white, with red cheek; first quality. Tree healthy, good grower and productive. Middle of August. (s-c.)

Hill's Chili—Tree very hardy, slow grower, great bearer. Excellent. Early Sept. (f.)
Honest John—Medium to large; flesh yellow and of good quality. Tree vigorous and productive. First of September. (f.)

Jacques' Rareripe—Very large; deep yellow; has a high reputation. Last of Aug. (f.)

Morris White—Medium; dull white; flesh white; juicy and delicious; productive.

Middle of September. (f.)

Mountain Rose—Large: red; flesh white, juicy, rich and excellent; one of the best early peaches. Should be in every collection. First of August. (s-c.)

Old Mixon Cling—Large; pale yellow, with red cheek; juicy, rich and high flavored; one of the best clingstone peaches. Last of September. (c.)

**Old Mixon Free**—Large; pale yellow, with a deep red cheek; tender, rich and good; one of the best. First to middle of September. (f.)

Salway--Fruit large, roundish; deep yellow, with a rich, marbled, brownish red cheek; flesh yellow, firm, juicy, rich and sugary. October. (f.)

Schumaker—One of the earliest peaches known; of very large size, some samples measuring eight or nine inches in circumference; stands the winters as well as the Early Crawford; flesh yellowish white and quality good. August. (c.)

Smock-Large size; light orange yellow, with red cheek; flesh yellow, juicy and rich. October. (f.)

Sneed—The earliest peach known, ripening ten days before the Alexander. Fruit creamy-white. well colored with bright crimson; ripens to perfection on the tree. Quality very poor; very productive, and valuable only on account of its extreme earliness. (c.)

Stevens' Rareripe—Quite large, yellowish white, deep red cheek; flesh white and juicy. Very productive and free from disease. Commences to ripen immediately after Late Crawford, and continues three or four weeks. Last of September and first of October. (f.)

Stump of the World—Very large, roundish; skin white, with a bright red cheek; flesh white, juicy and good. End of September. (f.)

Triumph—Earliest yellow flesh peach known, and almost a freestone; ripens just after Alexander; fruit good size, yellow with crimson cheek.  $(s-\ell)$ 

Wager—Medium; yellow, colored in the sun: juicy and of fair flavor. The trees have remarkable vigor and vitality. Valuable for drying and canning. Very hardy. Last of August. (f.)

Waterloo—Originated at Waterloo, N. Y. Of medium to large size; color whitish green, marbled with red; flesh greenish white, with an abundance of sweet, vinous juice. July. (c.)

Wheatland – Fruit large; color golden yellow, with crimson tint; flesh firm and of fine quality. September. (f)

Wonderful—Large, uniform in size and shape: color rich golden yellow, largely overspread with vivid carmine, with ramblings of crimson. Flesh yellow, rich, high flavored and delicious, exceedingly firm: bright red at pit, which is very small and from which it parts freely. Middle of October. (f.)

Yellow Rareripe (Yellow Alberge)—Large: deep yellow, dotted with red: melting, juicy, with a rich flavor. Closely resembles Jacques' Rareripe. Last of August. (f.)

### SELECT APRICOTS.

A delicious fruit of the plum family, valuable for its earliness. It is liable to be attacked by curculio, and requires the same treatment as the plum; it bears immense crops, ripening in July and August.

Acme-Large, yellow, red cheeked; vigorous, hardy and productive. July.

Early Golden—Small; pale orange; juicy and sweet; hardy and productive. First of July.

Harris - Remarkable for size, beauty and productiveness. Is extremely hardy, standing the severest winters. Fruit of rich golden yellow and of the finest quality. Middle of July.

Moorpark—One of the largest; orange, with a red cheek; firm, juicy, with a rich flavor. Very productive. August.

#### RUSSIAN APRICOTS.

These are quite distinct from other European varieties. Their leading characteristics are extreme hardiness, early bearing, productiveness, and freedom from disease. The following are the best that have been thoroughly tested:

Alexander -An immense bearer. Fruit yellow, flecked with red; very beautiful. July. Alexis—An abundant bearer; yellow, with red cheek; slightly acid. July.

Catherine - Vigorous and productive. Medium sized, yellow, mild, sub-acid. July.

Gibb—Tree grows symmetrical: productive. Fruit medium, yellowish, sub-acid; the best early variety, ripening soon after strawberries. Last of June.

J. L. Budd—Tree a strong grower and profuse bearer. Fruit white with red cheek; sweet; the best late variety. August.

## QUINCES.

The Quince is generally well known and highly esteemed for cooking and preserving. It thrives best in a deep, rich soil, and is benefited by a clean, high cultivation. It is said to be improved by the application of salt in small quantities. The Quince is usually sold at the age of two or three years, and is from three to four feet in height.



which at a very low price would bring more than \$500.

Bourgeat (New)—The strongest and most distinct grower of all quinces, with large foliage and very handsome fruit. Keeps longer than most other sorts. Very promising.

Champion - Fruit very large, fair and handsome. Tree very productive; bears abundantly while young. Scarcely early enough north of Philadelphia.

Meech's Prolific—A valuable quince, remarkable for its early and regular bearing and great productiveness. The fruit is of good size and form, and bright orange yellow: flesh very fragrant, delicious and tender. Unsurpassed for cooking.

Orange—Large: bright golden yellow. One of the best and most desirable quinces in cultivation.

Rea's (Rea's Manmoth) - We consider this the best of all the quinces. The largest and in every respect the finest variety of the quince. A strong grower and very productive.

### SELECT GRAPES.

The Grape is the most healthful of all fruits, and the most highly esteemed for its many uses. It can be grown by everyone who has a garden, a yard, or a wall. It can be confined to a stake, bound to a trellis, trained over an arbor, or extended until it covers a large tree or building, and still it yields its graceful bunches of luscious fruit. Capable of most extraordinary results under wise management, it is prone also to give the greatest disappointment under bad culture or neglect. Other fruits may be had from plants that know no care; but grapes are to be had only through attention and forethought.

Soils.—Good grapes are grown on various soils, sandy, clayey, loamy, etc. The soil must be well drained, and there should be a free exposure to the sun and air. Hillsides unsuitable for other crops are good places for grapes.

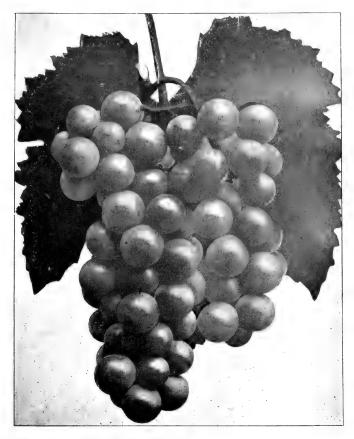
Crops.—Crop moderately if you would have fine, well ripened fruit. A vine is capable of bringing only a certain amount of fruit to perfection, proportioned to its size and strength; but it usually sets more fruit than it can mature; reduce the crop early in the season to a moderate number of good clusters, and cut off all the small inferior bunches; the remainder will be worth much more than the whole would have been. A very heavy crop is usually a disastrous one.

**Pruning.**—Annual and careful pruning is essential to the production of good grapes. If the roots are called upon to support too much wood, they cannot bring to maturity a fine crop of fruit. The pruning should be done in November, December, February or March, while the vines are entirely dormant.

Training Vines.—There are many methods of training grape vines, but as trellises are more generally employed, we will confine our suggestions to a description of the trellis method. To construct a trellis, take posts of oak, cedar or chestnut, 8 to 10 feet long; set them 3 feet in the ground and about 12 feet apart. Stretch No. 9 galvanized wire tightly along the post, and fasten them to each. Let the first wire be 18 inches from the ground, and the distance between the wires about 12 inches. Wooden slats about 1x2 inches may be substituted for wires. Trellises should be at least 10 feet apart; a greater distance is preferable. Set the vines about 20 feet apart. Prune the vines to two canes each for two years after they are planted. In February or March these canes should be cut back to 5 or 6 feet each, and tied along the lower wire or slat of the trellis, horizontally.

When the growth commences in spring, the young shoots must be reduced by dis-budding, so that they may stand about a foot apart on the cane, selecting, of course, strong, healthy shoots; as they grow they are tied up to the second, third and fourth wire or slat, and all superfluous ones removed, as well as the young *laterals* which will appear on vigorous vines; but the fruit-bearing shoots are allowed to extend themselves at will until September, when they may be pinched off at the ends to assist the ripening of the wood.

Gathering and Keeping.—Grapes for keeping to be used in their fresh state should be allowed to remain upon the vines until perfectly matured, but not much longer. Pick them when perfectly dry. Let them stand in open baskets or boxes for about ten days, in a cool, dry room, and after sorting out all decayed or imperfect berries pack them in shallow boxes and cover closely. Use no paper, but basswood or elm boxes, if convenient. Pine and other resinous woods should not be used, as they flavor the fruit disagreeably. After packing, keep the boxes where it is both cool and dry. Under careful management some varieties may be kept until spring.



CAMPBELL'S EARLY.

#### CLASS 1.-BLACK GRAPES.

Barry (Rogers' No. 43)—Bunch large but rather short; berries large, roundish, much like black Hamburg; delicate, sweet and tender. Middle of September.

Campbell's Early—The wonderful new seedling of the distinguished horticulturist, George W. Campbell, of Ohio. Vine healthy, hardy, vigorous and a profuse bearer; bunch and berry large and handsome: quality A 1; ripens with Moore's Early, but keeps either on the vine or in the house for weeks.

Champion—A large grape of medium quality; a strong grower and very hardy; the earliest of all; succeeds in all sections and makes a valuable market grape. Aug.

Concord—A large, handsome grape, very hardy and productive. Succeeds over a great extent of country; is one of the most popular market grapes. Ripens middle to last of September.

Eaton—Bunch very large, weighing 12 to 20 ounces; compact, often double shouldered: berries very large, many one inch in diameter; round, black, covered with a heavy blue bloom; adheres firmly to the stem. Skin thin, but tough; pulp tender, dissolving readily in the mouth. Very juicy; good as Concord, with much less of the native odor. Ripens with Concord or a little earlier.

- Hartford Prolific —Bunches rather large; berries large, globular; color almost black, covered with a beautiful bloom; of fair quality; valuable for its abundant bearing and early maturity. Last of August.
- Moore's Early—Bunch large, berry round; color black, with a heavy blue bloom; quality better than the Concord. Vine exceedingly hardy; has been exposed to a temperature of more than 20° below zero without injury, and is entirely exempt from mildew or disease. Its earliness makes it desirable for an early crop, maturing as it does ten days before the Hartford, and twenty before the Concord.
- Wilder (Rogers' No. 4)—Bunch very large: berry large, round, black; flesh tender, juicy, sweet. Ripens about with Concord; vine vigorous, hardy and a good bearer. Regarded as one of the best of the black varieties, and on account of its size and beauty is very valuable for market.
- Worden—Said to be a seedling of the Concord. Bunch large, compact, handsome; berries large—larger than those of the Concord. It ripens a few days earlier, and is superior to it in flavor. Destined to become very popular for the vine-yard and garden.

#### CLASS II.-RED GRAPES.

- Agawam (Rogers' No. 15)—Bunches large; berries large, round; color dark red or maroon; flesh quite tender, juicy, vinous; vine vigorous and productive. Not suited to the extreme North. Last of September.
- Amber Queen—Originated in Massachusetts. Bunch and berry of medium size: color light amber; flesh tender to the center: juicy, sprightly and delicious. Larger than Delaware and quite as early. First of September.
- Brighton—A superior family grape. Its remarkable vigor and hardiness of vine, large bunches, rich wine shade of the ripened berry, delicate skin, tender, almost seedless pulp, sugary juice and rich flavor, are combined qualities that are not united in such a degree in any other sort. It ripens a week or ten days before the Delaware, and bears most abundantly. Especially commended as a standard variety for the vineyard or garden. First of September.
- Catawba—Well known as the great wine grape of Ohio, Kentucky, etc. Bunches large and loose; berries large, of a coppery-red color, becoming purplish when well ripened; requires the most favorable soils and situations, good culture and warm seasons to mature perfectly. Last of September.
- Delaware—One of the finest grapes. Bunches small, compact, shouldered; berries rather small, round; skin thin, light red; flesh very juicy, with an exceedingly sweet and delicious flavor; moderate grower, hardy and productive. September.
- Lindley (Rogers' No. 9)—Bunch medium, somewhat loose; berry medium to large; round; color a rich shade of red, rendering it a very handsome and attractive grape; flesh tender, sweet, with a rich, aromatic flavor; ripens soon after the Delaware; vine vigorous and productive.
- Moyer—A new grape originating in Canada. In habit of growth and hardiness it resembles the Delaware very much, but ripens earlier. Flavor sweet, delicious; skin tough but thin; pulp tender and juicy. Berry and bunch small. Free from rot and mildew. September.
- Salem (Rogers' No. 53)—Bunch large and compact; berry large, of a light chestnut or Catawba color; thick skinned, perfectly free from hard pulp; very sweet and sprightly, with a most exquisite aromatic flavor; as early as the Delaware.
- Vergennes—Very productive; clusters large; berries large, holding firmly to the stem; color light amber: flavor rich and delicious; flesh meaty and tender. Ripens with Concord and is an excellent late keeper.

#### CLASS III.-WHITE GRAPES.

- Diamond (Moore's Diamond)—A cross between Concord and Iona. A vigorous grower, with leaf resembling Concord, very free from mildew. Bunch large, well filled, moderately compact, berry about the size of Concord; flesh melting and juicy, sweet to the center, and free from foxiness; skin thin, but sufficiently tough to bear packing and handling well. Ripens about with Delaware. Very productive.
- Green Mountain (Winchell)—New. Found growing in a garden on the side of the Green Mountains in Vermont, at an altitude of 1,400 feet, where it ripens its fruit perfectly. Vine strong, vigorous, healthy, very hardy and productive. Bunch long, compact shouldered. Color green or greenish white; skin thin; pulp exceedingly tender and sweet. Very early, being three weeks earlier than Concord.
- Lady—Said to be a seedling of the Concord. Bunch medium; berry medium to large; skin thin; color, light greenish yellow, with white bloom; pulp tender, sweet and pleasant. Vine hardy and vigorous. A valuable early white grape. Ripens with Hartford Prolific.
- Niagara—The vine is a strong grower and very hardy. Bunches very large and uniform and very compact; berries larger than Concord, and skin thin but tough, which insures their shipping qualities; quality good, very little pulp; melting and sweet to center; ripens before Concord.
- Pocklington—Bunch large; berry large, round, of a rich yellow color; flesh pulpy, juicy and of good quality; ripens at the time of the Concord. Vines vigorous, healthy, very hardy and productive. Quality good.

## SELECT CURRANTS.

Ripe just before raspberries are gone, and continuing in prime order for several weeks. There is no more useful fruit than the currant, and it is among the easiest to cultivate.

Plant in rows four feet apart each way, if practicable. Light and air will do as much to enhance the value of currant bushes as with other plants. Keep the ground mellow, free from weeds, and in a good state of fertility, and prune freely every spring. Should the currant worm appear, dust a little white hellebore powder, from a small coarse bag, over the bushes when the leaves are damp. In some instances it may be necessary to repeat this process, but the trouble and expense of exterminating the worms is trifling, if the powder is applied as soon as the worms appear.

Black Naples - Large, rich and tender; excellent for jellies and wine.

- Champion (Black)—A new variety from England; pronounced to be the finest Black Currant ever brought to notice. The bushes are very large and the flavor of the fruit excellent.
- Cherry (Red) Very large: deep red; rather acid; bunches short. Plants erect, stout, vigorous and productive.
- Fay's Prolific (Red)—Originated in Chautauqua Co., N. Y. A cross between Cherry and Victoria. Of large size, fine flavor, and claimed to be twice as prolific as the Cherry. Universally commended by those who have seen or had experience with it.
- La Versailles (Red)—A French variety resembling the Cherry; of large size, great beauty and productiveness.
- Lee's Prolific (Black)—A new English variety. The fruit is large and of superior quality; the bush is a vigorous grower and productive.

- Victoria (Red)—A splendid variety, ripening two or three weeks later than the others, and continuing in fine condition for a long period. Bunches extremely long; berries of medium size, brilliant red and of the highest quality.
- White Grape Very large; yellowish white; sweet or very mild acid: excellent quality and valuable for the table. The finest of the white sorts. Very distinct from White Dutch, having a low spreading habit, and dark green foliage. Very productive.

## SELECT GOOSEBERRIES.

This fruit is so useful for cooking when green or ripe, and may be canned with such facility, that it is being cultivated very extensively for both home and market use.

It requires the same cultivation and treatment for worms as the currant.

The American varieties, though not quite so large as the English, are of fine quality, and, unlike the latter, are not subject to mildew.

#### AMERICAN VARIETIES.

- Chautauqua One of the most prolific large gooseberries grown. Bush strong and vigorous, berries light yellow, free from spines and hair; veined and transparent; sweet and delicious.
- Columbus—A new American seedling of English type; large size; skin greenish yellow, smooth and high quality; bush strong, robust grower, and has never shown a trace of mildew; it is believed to be the best American gooseberry yet introduced.
- Downing—Large size, oval, greenish white; plant very vigorous and hardy, with stiff, strong shoots; foliage heavy, covering the fruit from the sun, and resisting mildew; bears most abundantly and is profitable for market and home use.
- Golden Prolific —Originated by us; thrifty, productive and absolutely blight proof. Fruit large, brilliant yellow, and of good quality.
- Houghton's Seedling -A vigorous American sort: very productive; free from mildew. Fruit medium, roundish, smooth, of a pale red color; tender, sweet, and of delicious flavor.
- Red Jacket—A new red berry of large size and good quality; hardy and productive.
- Smith's Improved—One of the largest American varieties of value; oval form; light green when ripe; sweet and excellent; plant vigorous, healthy and hardy.

#### ENGLISH VARIETIES.

There are few of these that succeed here because of their liability to mildew. The following varieties are believed to be exempt from this drawback, and we therefore offer them, believing that they will meet every requirement.

Crown Bob-Large, roundish oval, red, hairy; of first quality.

Industry—Large: oval; dark red, hairy; rich and agreeable. Although this is a foreign variety it has succeeded admirably in this country. We can confidently recommend it, both for the garden of the amateur and the market plantation. The plant is remarkably vigorous and productive, and the fruit large, beautiful and of excellent quality. Where shoots are left long, they fruit to the very tips. We regard it as, on the whole, the best foreign gooseberry ever introduced.

Whitesmith—Large, roundish oval, yellowish white, slightly downy; of first quality.

## SELECT RASPBERRIES.

Coming immediately after strawberries, when there is a dearth of other fresh fruits, raspberries are equally desirable for planting in the garden for home use, and in the field for market. They are easily cultivated. Beds seldom require renewing. Their season of ripening is long. The fruit bears transportation well, and aside from the demand for it for immediate consumption, it brings highly remunerative prices for drying and canning.

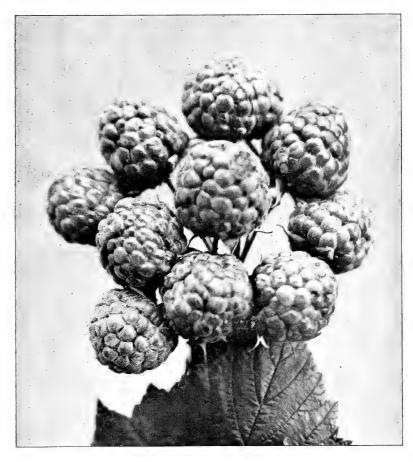
Plant in good soil, and manure from time to time freely. The hills should not be less than four feet apart each way, with two or three plants in a hill. Cut out the old and weak shoots each year, preserving not over six for fruiting. If the location is so much exposed that the plants are inclined to kill down seriously, they may be bent over in the fall, on mounds of earth formed at one side of the hills and covered sufficiently to keep them down until Spring. Surplus suckers take strength from the bearing plants. They should be cut away or hoed up frequently.

#### CLASS I.—RED AND YELLOW VARIETIES.

- Caroline—A seedling from Brinckle's Orange, combining the peculiarly melting and luscious flavor of that variety, with canes of great vigor, entire hardiness, and fair productiveness. Color pale salmon; berries large and of fine quality.
- Columbian—A vigorous grower: canes often ten to fifteen feet in length and over an inch in diameter. Never suckers from the roots. Very hardy, enduring 28° below zero. Fruit very large, dark red, bordering on purple; adheres firmly. Rich, sprightly flavor; the best for canning and evaporating, and one of the most productive.
- Cuthbert (Queen of the Market)—Large, conical; deep rich crimson; firm; of excellent quality. A vigorous grower, entirely hardy, and immensely productive.
- Golden Queen—Rich golden yellow. The flavor is of the highest quality. In size equal to Cuthbert; immensely productive; a very strong grower and hardy enough even for extreme northern latitudes.
- Hansell-Medium to large; bright crimson; firm, flavor fine. Earliest of all.
- **Loudon** (Red)—Canes strong and hardy, and wonderfully productive. Berries large size, of beautiful color and fine quality. Very desirable for home or market.
- Marlboro—The best early red raspberry for the North, ripening soon after Hansell. Hardy and productive.
- Miller (Red)—Bush a stout, healthy grower, well calculated to hold up the immense crops of fruit with which it is annually laden. Early, good shipper; fine quality.
- Shaffer's Colossal—Fruit large, purple, soft, with a sprightly sub-acid flavor; plant very vigorous, hardy and productive. Much esteemed in some localities. Season medium to late. Valuable for canning.
- Superlative—Large, conical, handsome, red. Canes are stout, supporting themselves and a heavy crop. Esteemed by some as a decided advance on all of the older sorts in this class. Perfectly hardy.

#### CLASS II.—BLACK CAPS.

- **Black Diamond** (Black)—A large, handsome berry, and on account of its great productiveness and splendid keeping and evaporating qualities, one of the most profitable to grow. Very sweet and excellent.
- Cumberland (Black)—Bush perfectly hardy: very productive; fruit enormous; quality unsurpassed. The great firmness of the berry makes it a splendid shipper; ripens just before the Gregg. A great acquisition.



GREGG.

Gault—The only perpetual raspberry known. A chance seedling from Ohio. Canes thrifty and hardy. The first crop ripens about with Gregg, is more abundant, and continues in bearing for three or four weeks, by which time the new canes begin to fruit and continue until checked by frost. This latter crop does not consist of a few scattering berries, but immense clusters, often numbering 100 berries on a single stalk. Fruit large size and of delicious flavor.

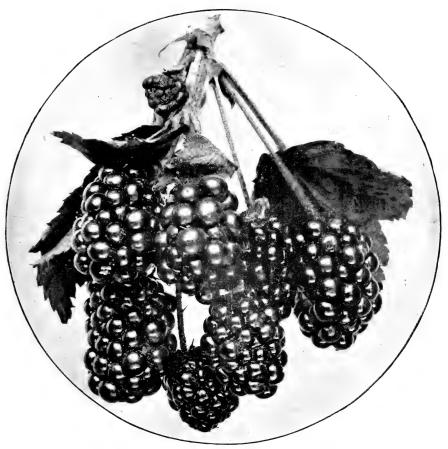
Gregg—Of great size: fine quality; very productive and hardy. It takes the same position among black caps as Cuthbert among the red sorts. No one can afford to be without it.

Kansas — Jet black, firm and delicious; as large or larger than Gregg; the hardiest black cap known, successfully withstanding the winters of Canada. A little later than Souhegan, and more prolific. One of the very best.

Mammoth Cluster—Large size, black or dark purplish black; very juicy, high flavored and delicious; perfectly hardy, and sufficiently firm to bear transportation to the most distant market.

Ohio—A very strong growing hardy sort; fruit as large as Mammoth Cluster and more productive; valuable for market and much esteemed for drying.

Souhegan (Tyler)—Highly commended as a market sort; enormously productive, perfectly hardy and free from disease of any kind.



RATHBUN.

## BLACKBERRIES.

This excellent and profitable fruit should be planted for garden use in rows five feet apart, with plants three feet apart in rows; for market, in rows six feet apart, with plants three feet apart in the rows. Give the plants the same cultivation as for raspberries. May be planted either Fall or Spring.

Agawam -Ripens earlier than other kinds, and has a flavor similar and equal to the wild berry. Perfectly hardy.

Ancient Briton — Medium sized, melting, without core. Bush hardy and very prolific. One of the very best old sorts, and still grown in immense quantities by successful market gardeners and orchardists.

Early Harvest—The earliest blackberry and consequently valuable for market. The canes are strong and upright in growth and enormously productive. Berries sweet and of the highest quality, though not as large as some others.

Eldorado—A new seedling from Ohio, claimed to be the best all-round berry yet produced, combining nearly all the good qualities found in a blackberry.

Eric - A variety from Northern Ohio; plant vigorous; berry large, round; good quality; early and productive. An excellent market sort.

Kittatinny-Large, black, sweet; soft when black; very hardy; ripens up gradually like the Lawton. One of the best.

Lawton—Very large, excellent quality, and an abundant bearer.

Lucretia (Dewberry)—A trailing form of the blackberry with large, beautiful, luscious fruit. It matures in advance of the ordinary varieties.

Maxwell's Early—Fruit large, sweet, rich, delicious; no core. Ripens with Early Harvest and fruit twice as large. The best extra early blackberry.

Rathbun—Origin, Western New York. Bush perfectly healthy, vigorous, but not a

high growing sort; very rarely suckers from the roots but propagates itself from the tips like the black raspberry. Fruit of largest size, highest quality, borne in great profusion. Beyond question it is the very best blackberry. (See cut, p. 37.)

Snyder—Extremely hardy; enormously productive; medium size; no hard sour core; half as many thorns as Lawton or Kittatinny.

Wachusett Thornless—Of fair size and quality; canes hardy and of healthy growth. It is almost free from thorns and fairly productive.

Wilson's Early—Very large size, oblong oval, black, quite firm, rich, sweet and good. Ripens early and matures its fruit rapidly; retains its color well after picking.

## STRAWBERRIES.

Those marked (P) have pistillate flowers and must be planted near perfect flowering kinds.

First of the small fruits comes the beautiful and wholesome Strawberry, and the profits resulting from its wise cultivation will satisfy any reasonable expectation.

Plant in March, April, May, September or October, in good soil deeply worked and well manured with muck, leaf mould, wood ashes or bone dust. Set 15 inches apart in rows 3 feet apart for field culture, and 15 inches each way for garden culture, leaving a pathway at every third row. Keep runners cut and cultivate clean. Mulch late in the fall and uncover early in spring, drawing about the plants to keep fruit from coming in contact with the ground.

- Bubach (P) Fruit uniformly large and handsome; conical, bright scarlet, moderately firm and of fair quality. Valuable for home use and near-by market. Season early to medium.
- Chas. Downing-Fruit large, conical, regular. Scarlet, juicy, sweet and rich with more of the wild strawberry flavor and fragrance than any other sort. Valuable for home use.
- Crescent (P)-Medium, uniform, conical; bright scarlet; ripens with Wilson but continues longer. Plants are wonderfully rank growers. Succeeds on all soils.
- Cumberland—Very large, conical and uniform; handsome and showy. Color beautiful light red. Moderately firm, pleasant, agreeable. Plant vigorous and productive. Splendid sort for home use or near-by market. Season medium.
- Greenville (P) Large size, good quality, and very productive. Medium to late. Plants vigorous and free from rust.
- Haverland (P)—Large, long, bright red; a great yielder. One of the best of recent introduction.
- Jessie-Large, handsome, roundish conical; firm; of good quality. Plant vigorous and productive. One of the best for home or market. Season early to medium.
- Parker Earle—A splendid new berry, originating in Texas. Berries uniformly large, regular, conical. Color glossy scarlet crimson, ripening to the tip. No hollow core. Quality good. Flowers perfect and always setting in perfect fruit. Plant extremely vigorous, healthy and enormously productive. It has yielded 15,000 quarts per acre, and is beyond doubt the most valuable variety in existence.
- Sharpless-This grand old sort originated in Pennsylvania, and has been planted everywhere with very satisfactory results. Fruit large size, showy and good. Season medium.
- Wilson's Albany—The old standard sort for preserving and canning. Vines subject to blight in some sections, otherwise a variety of great value.

## MULBERRIES.

The Mulberry is valuable both as an ornamental shade tree and for its fruit. It is of easy culture, requiring little or no pruning.

Downing's Everbearing—The beauty of this as a lawn or street tree is quite enough to commend it, but in addition it yields an abundant supply of its large refreshing berries for about three months "I regard it as an indispensable addition to every fruit garden; I had rather have one tree of Downing's Everbearing Mulberry than a bed of strawberries."—Henry Ward Beecher.

New American—A sport from Downing, and precisely like that well known sort, but decidedly hardier.

Russian—A hardy, rapid-growing tree, introduced from Russia by the Mennonites; foliage abundant; valuable for wind-break. Fruit of little value.

White-Mostly cultivated for silk and honey. Fruit small and very sweet.



## ASPARAGUS.

This earliest and finest of spring vegetables is among the easiest cultivated and most profitable. A bed once planted suffers no deterioration for thirty years or more, if it is properly attended to and well manured.

See that the ground is well drained, naturally or otherwise; work it up fine and deep and make it very rich with well rotted barnyard manure. Place the plants eight inches apart in rows three feet apart. Spread out the roots in a trench made deep enough to permit their crowns to be covered with three or four inches of mellow earth. Give the bed liberal dressings of manure at intervals, and, except near the sea shore, three pounds of salt per square yard early every spring. Do not cut for use until the second season.

Conover's Colossal—This variety is much superior in size and quality to any of the old common sorts, being remarkably tender and fine flavored.

Palmetto—Until recently we believed that Conover's Colossal was the best sort known, but we are now forced to concede that the Palmetto is earlier and a better yielder, and more even and regular in its growth, and that it will eventually supersede the old favorite. It has been tested both north and south, and has proved entirely successful in every instance.



## RHUBARB, OR PIE PLANT.

This deserves to be ranked among the best early products of the garden. It affords the earliest material for fine pies and fresh table sauce, continues long in use, and is valuable for canning. Make the ground rich and deep, as recommended for Asparagus. Plant four feet apart each way.

Early Scarlet—Smaller than Myatt's, but extremely early and very highest quality. The best extra early sort for home or market.

Myatt's Linnaeus—Those who have never grown this variety, which is of superior quality, will hardly recognize the old "Pie Plant." It is an early, tender variety, without being in the least tough or stringy, with a mild sub-acid flavor.

## ORNAMENTAL DEPARTMENT.

#### BRIEF SUGGESTIONS TO PLANTERS.

What to Plant — Impressed with the importance of planting only the most hardy ornamental trees and shrubs, and in order that our patrons may be spared much disappointment and expense, we have, as far as possible, omitted from our catalogue everything that is liable to suffer from severe cold.

We have with great pains secured, both at home and abroad, all valuable hardy material, so as to render our assortment of this class as complete as possible. An examination of the catalogue shows what an extensive variety of stock is offered, enabling the planter by a judicious use of the same to accomplish any desired result with perfectly hardy trees, shrubs and plants.

For convenience we have grouped the trees under the following heads: Upright Deciduous; Weeping or Drooping Deciduous, and Evergreen. The shrubs have been similarly arranged, and parties desiring to make selections for particular purposes will find this classification useful.

For Parks and Extensive Grounds-No difficulty can be experienced by any one in making selections for this purpose. But we cannot impress too strongly the importance and value of flowering shrubs for effective masses and groups. There are many who imagine that the Rhododendron and Azalea are indispensable. This is a great error. In this latitude both Rhododendron and Azalea require prepared soil and protection, while hardy shrubs like the Weigela, Deutzia, Spiræa, Hardy Hydrangea, Japan Quince, Double-flowering Almond, Lilac, Snow-Ball, Althea, Pæony, Phlox and Japan Anemone, when planted in masses, produce a magnificent effect, need no protection, and demand little skill or care in their management. What grand masses of bloom can be had throughout the season by proper use of the various families! Then the purple and variegated-leaved trees and shrubs may also be planted in such a manner as to afford a rich and striking contrast.

Groups of flowering trees form superb objects at the blossoming season, and it is

strange that Planters do not employ them more.

Highly effective groups can be formed of trees and shrubs possessing brightcolored bark in winter.

For Lawns and Small Places—Whatever specimens are planted should be of the finest species, of moderate size, of graceful habits of growth and handsome foliage.

A pendulous tree or one with variegated foliage may be occasionally introduced, and will add to the beauty of the grounds. Depend mainly upon dwarf shrubs for small places, and in selecting, aim at securing a succession of bloom. Dwarf evergreens are very useful, and in small grounds, hardy herbaceous border plants can be used with the most satisfactory results; a proper selection will afford as much bloom as ordinary bedding plants, and at half the trouble and expense.

When to Plant—Deciduous Trees, Shrubs and Vines can be planted either in Spring or Fall. Spring is the best time for evergreens generally.

How to Plant-Preparation of the Roots-Cut off smoothly all bruised or broken roots up to the sound wood. This prevents their decaying and hastens the emission of new roots and fibres.

Preparation of the Top-This consists of cutting back the top and side branches in such a way as to correspond with the more or less mutilated roots as follows:

Trees with branching heads, should have the small branches cut clean out, and the larger ones, intended for the framework of the tree, cut back till within two or three buds of their base.

In cases where there is abundant root, and small top or few branches, the pruning need be very light, but where the roots are small and the top heavy, severe pruning will be necessary. These remarks are applicable to all Deciduous Trees and Shrubs. Evergreens seldom require pruning, but Arbor Vitæ and other Evergreens planted in hedge rows may be advantageously shorn immediately after planting.

Pruning, as practiced by some people, has the effect to render trees and shrubs unnatural and inelegant. We refer to the custom of shearing trees, particularly evergreens, into cones, pyramids and other unnatural shapes. Every tree, shrub and plant has a habit of growth peculiar to itself, and this very peculiarity is one of its beauties. If we prune all trees into regular shapes we destroy their identity. The pruning knife, therefore, should be used to assist nature, and handled with judgment and care, to lop off straggling branches, to thin the head of a tree which has become too dense, and to remove dead wood. Sometimes it becomes necessary to prune severely to keep a tree from attaining too great size.

Shearing may be practiced on hedges, but never on trees or shrubs.

Pruning Shrubs—Many persons trim and shear them into regular shapes, imagining that regular outline adds to their effect and beauty. While symmetry and regularity of form are to be admired in a shrub, this quality should never be gained

at the expense of health and natural grace.

Each shrub has peculiarities of habit and foliage, and we should aim to preserve them as far as possible. Judicious pruning to secure health and vigor is necessary, but trimming all kinds of shrubs into one form shows a lack of appreciation for natural beauty, to say the least. Weigelas, Deutzias, Forsythias and Mock Orange, flower on the wood of the preceding year's growth, hence these shrubs should not be pruned in winter or spring, but in June, after they have finished flowering, when the old wood should be shortened or cut out, thus promoting the growth of the young wood which is to flower the following season.

Spireas, Lilacs, Altheas, and Honeysuckles may be trimmed during the winter or early in the spring, but the branches should only be reduced enough to keep them in good shape. The old growth should be occasionally thinned out and the suckers and root sprouts removed when they appear. The best time however, for pruning all shrubs, is when they have done flowering. The Hydrangea Paniculata Grandiflora

should be severely cut back and thinned early in spring.

Pruning Evergreens—Use the knife occasionally to thicken the growth and preserve the shape. This can be done in April or May, just before the trees start to grow.

\*\*The weeping or drooping varieties will be found further on under heading "Weeping or Drooping Deciduous Trees."

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## UPRIGHT DECIDUOUS TREES.

ALDER (Alnus).

The cut-leaved varieties are among the finest ornamental trees, and are rapid and robust growers.

European, or Common (Glutinosa)—Rapid growing; when matured 30 to 560 feet high; specially adapted to moist situations.

Imperial Cut-Leaved (Laciniata Imperialis)—A very striking and beautiful tree, with delicately and deeply cut foliage; hardy, and of vigorous growth, forming an open and handsomely shaped head, fifteen to twenty feet high when fully grown. One of the finest cut-leaved trees in cultivation.

#### ALMOND (Amygdalus).

Davidiana—A vigorous beautiful tree covered in April with double rose-colored blossoms; like small roses. The first tree to flower in the spring.

Hard Shell—A fine, hardy variety with large, plump kernel, and exceedingly ornamental when in bloom.

Soft Shell—This is the Almond of the shops, and though preferable to the former is not so hardy; kernel sweet and rich.

#### ASH (Fraxinus).

This family comprises many varieties of great value.

American Black (Sambucifolia)—A small medium-sized tree, with fine foliage.

American White (Americana)—Our own noble native ash.

Cut-Leaved (Laciniata)—A rare and elegant lawn tree.

European Flowering (Ornus)—Flowers greenish white, fringe-like, produced in June; grows from twenty to thirty feet.

Golden Barked (Aurea)—Particularly conspicuous in winter.

#### BEECH (Fagus).

Cut-Leaved (Incisa)—A fine erect tree, with deeply incised foliage; a variety of rare beauty and excellence.

Fern-Leaved (Heterophylla)—An elegant tree of symmetrical habit, having beautifully cut, fern-like foliage, and a graceful, wavy aspect. When fully grown, twenty-five to thirty-five feet high.

Purple-Leaved (Purpurea)—A remarkable variety, with very dark purplish foliage, changing to crimson, and again in the fall to dark purplish green, making a striking contrast with the green of other trees. Highly ornamental and desirable. When fully grown, forty to fifty feet high.

Riversii (Rivers' Smooth-leaved Purple)—This variety, which we procured of Mr. Rivers, differs from the ordinary purple-leaved beech by its compact symmetrical habit of growth, and crimson foliage early in the spring, changing to a dark purple in summer. The finest of all purple-leaved trees.

#### BIRCH (Betula).

Birch, Cut-Leaf Weeping—See Weeping Trees.

European, or Common White (Alba)—A well-known variety, making a vigorous, erect growth, and having long, slender branches. Very desirable. Fifteen to thirty feet when fully grown.

Purple-Leaved (Atropurpurea)—A variety possessing the vigorous habit of the species, and having rich purple foliage. Twenty to twenty-five feet when fully grown.

Youngs' Weeping—See Weeping Trees.

#### CATALPA (Indian Bean).

A valuable class with ornamental foliage and flowers and of easy culture on common soils. Leaves of immense size and heart-shaped. Flowers borne in large, upright panicles. Flowers in July when few trees are in bloom. Valuable for lawn, street or park planting. They are of rapid growth and flower when quite young.

Bungei (Umbrella Catalpa)—Grafted on stems six to eight feet high, it makes an umbrella-shaped top without pruning. Perfectly hardy, and flourishes in almost all soils and climates. Leaves large, glossy, heart-shaped, deep green; lay like shingles on a roof; always make a symmetrical head. One of the most unique trees; a valuable acquisition, desirable for lawn, park and cemetery planting.

Speciosa—This early-blooming, upright variety is much hardier than the syringaleaved, having proved itself able to stand the severe winters of Wisconsin and Iowa, making when planted in groves, straight, symmetrical trees, suitable for posts or railwayties, for which purposes it is one of the most useful trees known, lasting in many instances nearly or quite a century.

Tea's Japan Hybrid—Large, luxuriant foliage, handsome white flowers, with purple dots and a touch of yellow around the throat, which have a pleasant, delicate fragrance; and a tree in bloom not only presents a magnificent spectacle to the eve, but also fills the air for quite a distance with its agreeable odors. In rapidity of growth it rivals the most luxuriant trees of temperate climates, while its hardiness has been demonstrated by its standing uninjured 25° or more below zero.



CATALPA BUNGEI.

#### CHERRY (Cerasus).

Double Flowering (Flore alba plena)—A tree of medium growth, producing clusters of double white flowers in May. Blooms so profusely as to completely hide the branches from view. Fifteen to twenty feet high when fully grown.

Japan Weeping-See Weeping Trees.

#### CHESTNUT (Castanea).

American—A well known forest and nut-bearing tree; of great value for ornamental purposes.

Japan—Tree medium size and decidedly ornamental. It fruits when very young; nuts are much larger than the Spanish and equal to it in flavor. Believed to be a great acquisition. Not hardy at the north.

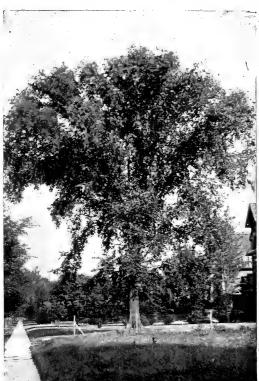
Spanish—A valuable species for both ornament and fruit. It forms a handsome lawn tree, and produces fruit three or four times as large as the American variety. Not hardy at the north.

#### CRAB (Pyrus).

Bechtel's Double-Flowered, American—One of the most beautiful of the many fine varieties of flowering Crabs. Tree of medium size, covered in early spring with large, beautiful, double, fragrant flowers of a delicate pink color. From a distance the flowers have the appearance of small Roses. A great acquisition, and certain to become very popular as soon as known. Blooms when quite young.

Chinese Double Rose-Flowered—Has beautiful double, rose-colored, fragrant flowers nearly two inches in diameter in May. Should be in every collection.

Chinese Double White-Flowered - Produces double white fragrant flowers in clusters.



AMERICAN WHITE ELM.

#### DOGWOOD (Cornus).

Red Flowering (Flore rubra) — A valuable variety, producing beautiful carmine flowers; of great value.

White Flowering (Florida)—A fine American tree, growing from sixteen to twenty-five feet high. Foliage of a grayish green color; very glossy and handsome, turning in the autumn to a deep red, rendering the tree one of the most beautiful objects at that season. The flowers appear before the leaves in the spring and are about three inches in diameter; white and very showy. It is one of the most valuable ornamental trees.

#### ELM (Ulmus).

Noble trees for street or lawn planting.

American White (Americana) — A native tree of large size, with open, spreading head and graceful drooping branches. Very popular in nearly all sections, and valuable for street planting. Succeeds admirably even where the soil is somewhat heavy and damp.

Camperdown-See Weeping Trees.

English (Campestris)—A native of Europe, forming a tall, erect tree, with slender branches and small leaves. When fully grown, forty to fifty feet high.

Golden-Leaved (Wredei aurea)—Beautiful golden yellow foliage; should be planted in half-shade.

Huntingdon (Huntingdoni)—One of the most desirable elms for any purpose; of very erect habit and a rapid, vigorous grower. Bark clean and smooth. When fully grown, forty to fifty feet high.

Purple-Leaved (Purpurea)—A beautiful and distinct variety; leaves of rich purple when young. When fully grown, fifteen to twenty-five feet high.

Red, or Slippery (Fulva)—A well known native variety.

Scotch (Montana)—A fine spreading tree, of rapid growth and large foliage. When fully grown, forty to fifty feet high.

#### FILBERT (Corylus).

American—Smaller and with a thicker shell than the English, but of good flavor; hardy and productive.

English—The fruit of this being so much larger and better flavored than our native species, gives it the preference for cultivation over the latter in localities where it will succeed.

Kentish Cob—One of the largest and finest of Filberts; oblong, meaty and of excellent quality.

HICKORY (Carya).

Shell Bark—To our taste, no other nut that grows, either foreign or native, is superior to this in quality; it possesses a peculiar, rich, nutty flavor excelled by none. The tree is of sturdy, lofty growth. The wood, on account of its great strength and elasticity, is highly prized for making agricultural implements, and is unsurpassed for fuel.

#### HORSE CHESTNUT.

(Aesculus.)

#### Double White Flowered -

A superb variety, with double flowers, in larger panicles than the common sort. The tree is of fine pyramidal habit. Mr. Scott, in his interesting work entitled "Suburban Home Grounds," writes thus: "At Rochester there is a noble specimen about forty feet high, which in the blossoming season, is like a verdant tower, spangled all over with hyacinth bouquets."

Red-Flowered—One of the finest trees in cultivation. Has showy, red flowers; blooms a little later than the white.

White Flowered—The common, well-known species; a hardy, healthy tree, free from all diseases; covered in May and June with magnificent, erect spikes or panicles of white flowers, slightly marked with red.



WHITE-FLOWERING HORSE CHESTNUT.

#### JUDAS TREE, OR RED BUD (Cercis).

American Judas—A very ornamental native tree, of medium size, irregular rounded form, with perfect heart-shaped leaves of a pure green color, glossy surface above and grayish green beneath. The tree derives the name of Red Bud from the profusion of delicate reddish purple flowers with which it is covered before the foliage appears. Flowering at the same time with the Chinese Magnolias, it may be planted among them in groups with fine effect. Grown as single specimens they are also beautiful and attractive, and deserve to be classed among our finest ornamental trees.

Japan Judas – Of medium size, rounded form, foliage deep shining green, and heart-shaped; flowers larger than those of American, and of a rich reddish purple color; a valuable addition to the list of choice small trees.

#### LABURNUM (Cytisus).

Alpine, or Scotch (Alpinus)—A valuable variety, producing long clusters of yellow blossoms.

Common, or Golden Chain—Bears long, pendent racemes of golden flowers in June; smooth and shiny foliage. Very showy and beautiful, and valuable for every lawn. When fully grown, fifteen to twenty feet high.

#### LARCH (Larix).

European (Europæa)—A beautiful, rapid-growing tree, of irregular, pyramidal form, with small drooping branches. Very desirable and universally sought in all sections. When fully grown, thirty to forty feet.

#### LINDEN, OR LIME (Tilia).

American, or Basswood (Americana)—A rapid-growing, open-head or spreading tree, with large leaves and fragrant flowers. Very desirable on account of its fine, luxuriant foliage. When fully grown, forty to sixty feet.

Cut, or Fern-Leaved (Laciniata)—A very attractive variety.

European (Europæa)—A very fine pyramidal tree, with large leaves and fragrant flowers; smaller in all its parts than the preceding, and more valuable for street or lawn planting. When fully grown, thirty to fifty feet.

European White-Leaved (Alba)—A vigorous growing tree, with large, handsome foliage, quite downy and whitish underneath; smooth above; very valuable. When fully grown, twenty to twenty-five feet.

#### MAGNOLIA (Magnolia).

Very beautiful, but exceedingly difficult to transplant with success.



MAGNOLIA.

Acuminata (Cucumber Tree)—A magnificent tree, growing very rapidly, and often attaining from sixty to ninety feet in height, producing in June. yellow flowers tinted with bluish purple. Very desirable on account of its fine, luxuriant foliage, rapid growth, and fine flowers.

Conspicua (Chinese White)—A small tree, quite hardy, producing large, pure white flowers, very numerous, and appearing before the leaves.

Lenne (Lennei)—A very showy flower; cup-shaped; crimson purple outside and pearl colored within. One of the finest of the purple magnolias.

Soulangeana—Shrubby and branching while young, but becoming a fair-sized tree. Flowers white and purple, cup-shaped, and three to five inches in diameter. Foliage large, glossy, and massive. One of the hardiest and finest of the foreign magnolias.

Speciosa—Flowers a little smaller than Soulange; bloom a week later and remain longer on the tree than any other variety; hardy and valuable.

Tripetela (Umbrella Tree)—A hardy, medium-sized tree, with immense leaves and large white flowers four to six inches in diameter, appearing in June.

#### MAPLE (Acer).

Ash-Leaved, or Box Elder (Negundo)—A native tree, maple-like in its seeds and ash-like in foliage; of irregular spreading habit and rapid growth.

European Sycamore—A handsome tree, of rapid, upright growth, with large foliage, and smooth, ash-gray colored bark.

Japan Blood-Leaved—Of dwarf habit and rounded form; foliage five-lobed and serrated; reddish crimson in June, changing to dark purple which it retains all summer. A charming variety, and one of the best of the Japanese Maples.

Japan Cut-Leaved Purple—One of the most striking and handsome varieties of the Japanese Maple. Form dwarf and weeping. The leaves are of a beautiful rose-color when young, and change to a deep and constant purple as they become older.

Norway—Large, handsome, with broad deep green, shining foliage. Valuable for street planting.

Purple-Leaved Sycamore —A tree of fine, robust habit. Foliage deep green on the upper surface, and purplish-red underneath.

Red or Scarlet—A native species of medium size and rounded head; produces deep red blossoms which appear before the leaves. In autumn the foliage changes to a brilliant scarlet

Schwedler's Norway—A beautiful variety, with the young shoots and leaves of a bright purplish and crimson color, which changes to a purplish green in the older leaves. One of the most valuable trees of recent introduction.

Silver-Leaved, or Soft — A well known native tree of rapid growth, large size, and irregular rounded form: foliage bright green above and silvery white beneath; tree very hardy and easily transplanted. One of the most useful trees.

Sugar, or Rock—Of stately growth, fine form and foliage; very desirable as an ornamental and shade tree.

Wier's Cut-Leaved Silver—This is one of the most remarkable and beautiful trees with cut or dissected foliage yet offered. Its growth is rapid, shoots slender and drooping, giving it a habit almost as graceful as the Cut-Leaved Birch. The foliage is abundant, silvery underneath, and on the young wood especially, deeply and delicately cut.

Worle's Golden-Leaved Sycamore— In the spring the foliage is of a golden vellow color, changing to a duller shade as the season advances. The young growth continues brilliant throughout the summer. A valuable and effective variety for grouping with purple-leaved trees.



SCHWEDLER'S MAPLE.

#### MOUNTAIN ASH (Pyrus Sorbus).

Very ornamental, especially when covered with their bright scarlet berries.

American (Americana)—A favorite, erect-growing tree, of medium size, producing white flowers early in spring, followed by clusters of bright scarlet berries, which remain on the tree through the winter months.

European (Aucuparia)—Similar in appearance to the above, with finer foliage, and smaller, deeper-colored berries; much more desirable than the American, and

everywhere very popular. When fully grown, twenty to thirty-five feet.

Oak-Leaved (Quercifolia)—A very distinct and desirable tree, with compact, pyramidal head and dark-lobed leaves, downy underneath: producing the same flowers and berries as the preceding. Very hardy and desirable for planting on lawns or in dooryards. When fully grown, twenty to twenty-five feet.

#### MULBERRY.

See Mulberries, page 39.

#### OAK (Quercus).

American Red (Rubra)—Very large in stature and leaf, and unusually quick in growth. The young shoots and leaf-stems are red, the foliage purplish crimson in autumn. Four to five feet.

American White (Alba) — One of the finest American trees; of large size, and spreading branches; leaves lobed, pale green above and glaucous beneath. Makes an immense tree.

Pin (Palustris)—This is considered the most beautiful of all the Oaks, and is certainly the most popular for street and park planting. As the tree grows the branches droop until the lower ones touch the ground, giving it a peculiarly beautiful ovate outline. The leaves are deep green, glossy and finely divided, flaming to orange and scarlet in the fall. The avenues of Pin Oaks in Fairmount Park, Phila., and at Dosoris, L. I., are greatly admired.

Scarlet (Coccinea)—A native tree of rapid growth, pyramidal outline, and especially remarkable in autumn, when the foliage changes to a bright scarlet.

Turkey (Cerris)—This is a remarkably handsome ornamental sort, beautiful for lawns. It forms a medium-sized tree of thick, dense growth. The acorn-cups are mossy; the leaves are finely lobed and remain deep green until destroyed by frosts.

#### PEACH (Persica).

Purple, or Blood-Leaved (Vulgaris foliis purpureis)—Valuable on account of its hand-some foliage.



DOUBLE-FLOWERING PEACH.

Rose-Flowering, Double (Rosea fl. pl.)—A small sized-tree, with beautiful delicate rose-colored flowers. Blooms in May. When fully grown, eight to ten feet.

White-Flowering, Double (Alba fl. pl.)—Similar to the preceding, with white flowers. Blooms in May. When fully grown, eight to ten feet.

#### PECAN.

Pecan—This is a native nut belonging to the (Carya) Hickory-nut family. The tree is of tall growth, and bears abundantly; not entirely hardy at the north, but should be planted wherever it will succeed. The shell is very thin, the kernel sweet and delicious.

#### POPLAR (Populus).

Desirable where rapid growth is wanted.

Balsam-Large, glossy leaves; tree grows rapidly.

Bolleana (Silver-Leaved)—A tree of wonderfully rapid growth and upright habit; leaves large, dark rich green above, and white as snow beneath. When fully grown, forty feet.

Carolina—A remarkably rapid, luxuriant grower; leaves large, glossy, pale to deep green. Valuable as a street or shade tree when shade is desired quickly. It will also be found useful for planting as a screen to hide unsightly buildings, etc.

Lombardy—Well known for its erect, rapid growth and commanding form. Very desirable in large grounds or along roads, to break the average height and forms of other trees. When fully grown, fifty to seventy-five feet.

#### SALISBURIA. MAIDEN-HAIR TREE, OR GINGKO.

Adiantifolia—A rare, beautiful tree from Japan, with remarkable fern-like foliage, distinct and fine. Especially desirable for planting on lawns or in dooryards. A rapid grower.

#### SWEET GUM, OR BILSTED (Liquidambar).

One of the finest American trees. Of medium size and moderate growth; form round-headed or tapering; leaves resemble somewhat those of the maple, but are star-shaped and of a beautiful glossy green color in summer, turning to a deep purplish crimson in autumn; bark corky. Beautiful in all stages of growth, it is particularly handsome and striking in autumn.

#### THORN (Crataegus).

The Thorns justly deserve to be classed among the most beautiful flowering trees. They are generally dense, low growers, occupying comparatively little space, and well adapted to beautify small grounds. They flower in May and June.

Double Red-Bright double red flowers.

Double White-Has small double white flowers.

Paul's Double Scarlet-Flowers bright carmine red.

#### TULIP TREE, OR WHITE WOOD (Liriodendron).

Tulipifera—One of our largest native trees, with large, glossy leaves, shaped like a violin, and beautiful tulip-like flowers. Very desirable for planting on lawns, or where trees are desired for rapid growth. When fully grown, fifty feet.

#### VIRGILIA LUTEA (Cladrastis).

Yellow Wood—One of the finest native trees. Flowers very fragrant, pure white, and produced in long drooping racemes in June.

#### WALNUI (Juglans).

Black—The well known native species; hardy, prolific and valuable; timber in point of durability is difficult to excel.

Butternut—A rapid growing native tree, producing edible nuts.

English (Madeira Nut)—This rich and fine flavored nut is moderately hardy, and makes a vigorous growth. Well worthy of cultivation.

#### WILLOW (Salix).

Golden (Vitellina aurantiaca)—Very conspicuous on account of its yellow bark.

Kilmarnock—See Weeping Trees.

Laurel-Leaved (Laurifolia)—A fine tree, with large shiny leaves.

New American—See Weeping Trees.

Rosemary-Leaved (Rosmarinifolia)—Branches feathery, with small, silvery foliage; makes a striking, pretty, small-sized tree when grafted standard high. This, the Kilmarnock and the New American Weeping, should always find a place in every yard and garden, and will produce a pleasing effect. When fully grown, ten feet.

## WEEPING, OR DROOPING, DECIDUOUS TREES.

Much attention is now given to this interesting class of trees, and we therefore place them separately for the greater convenience of our friends. For the benefit of those unacquainted with their habits, we would say that they should be divided into two separate classes, namely: those which are grafted where the top or head commences to form, as in the case of the Kilmarnock Willow, and those having long, slender branches which droop naturally, like the Cut-Leaved Birch; the first assumes that conspicuous, umbrella-like form so well known, and so excellently adapted for planting in cemeteries, small yards and gardens. The latter have tall-growing trunks, with long, slender branches, and are really handsome. They are well adapted for larger places, where they can have sufficient room. In such situations, the elegance and grace of their branches in motion, or at rest, are so graceful to the eye that among ornamental shrubbery they have few if any superiors.

ASH (Fraxinus).

European Weeping (Excelsior pendula)—One of the finest lawn or arbor trees; covers a great space and grows rapidly; well adapted for covering arbors.

BEECH (Fagus).

Weeping—(Sylvatica pendula) — A remarkably vigorous, picturesque tree of large size. Its mode of growth is extremely curious. The trunk or stem is generally straight, with the branches tortuous and spreading; quite ungainly in appearance divested of their leaves, but when covered with rich luxuriant foliage, of wonderful grace and beauty.

BIRCH (Betula).

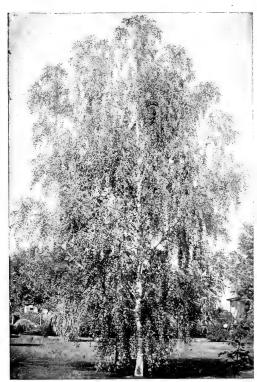
Cut-Leaved Weeping—Beyond question one of the most popular of all weeping or pendulous trees. Its tall, slender, yet vigorous growth, graceful, drooping branches, silvery-white bark, and delicately cut foliage, present a combination of attractive characteristics rarely met with in a single tree.

Young's Weeping (Pendula Youngii)—Originated near Milford, Eng., where it was found trailing upon the ground. Grafted into stems of some height, it forms pendulous heads, drooping to the ground in fine, thread-like shoots; very beautiful.

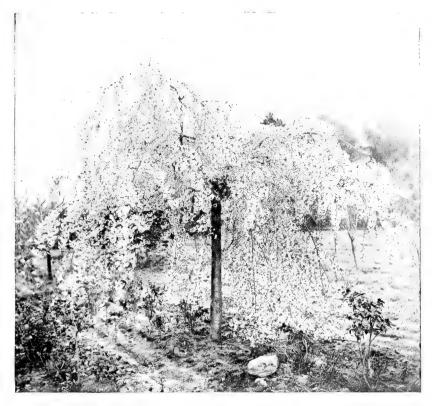
#### CHERRY (Cerasus).

Japan Weeping, Rose-Flowered— One of the finest pendulous trees for lawns or small grounds. The branches are slender, and fall gracefully to the ground, and the flowers are rose-colored, appearing before the leaves. Undoubtedly one of the finest weeping trees.

Japan Weeping, White—Feathery and graceful; flowers single white; fruit red. One of the finest of the small-headed pendent cherries.



CUT-LEAVED WEEPING BIRCH.



JAPAN WEEPING ROSE-FLOWERED CHERRY.

#### DOGWOOD (Cornus).

Weeping (Pendula)—A weeping form of the White Flowering, distinct from all other weeping trees. Possesses the abundant bloom, handsome foliage and fruit of the White Flowering, and makes a magnificent specimen, either summer or winter.

#### ELM (Ulmus).

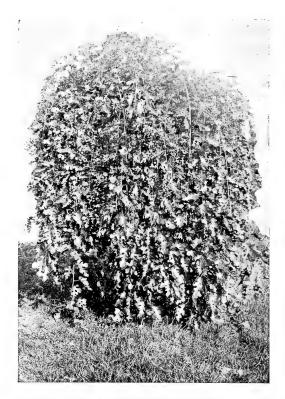
Camperdown (Pendula)—Grafted six to eight feet high, this forms one of the most picturesque drooping trees. It is of rank growth, the shoots often making a zigzag growth outward and downward of several feet in a single season. The leaves are large, dark green and glossy, and cover the tree with a luxuriant mass of verdure.

#### LINDEN (Tilia).

White-Leaved Weeping (Alba pendula)—A very beautiful tree having large foliage, silvery-white underneath, and slender, drooping branches.

#### MOUNTAIN ASH (Pyrus Sorbus).

Weeping (Aucuparia pendula)—The branches of this distinct variety are of a straggling, pendent character, turning and twisting in all directions and producing a very pleasing effect. Covered during the autumn with bright red berries.



TEAS' WEEPING MULBERRY.

#### MULBERRY (Morus).

Teas' Weeping—The most graceful and hardy Weeping tree in existence. Wholly unlike anything heretofore introduced. Forms perfect umbrella-shaped head, with long, slender, willowy branches, drooping to the ground. All who have seen it agree that in light, airy gracefulness, delicacy of form and motion, it is without a rival. It will undoubtedly take foremost place among weeping trees; it has beautiful foliage; is wonderfully vigorous and healthy; is one of the hardiest, enduring the cold of the North and heat of the South; safe and easy to transplant. Admirably adapted for ornamenting small or large grounds, or for cemetery planting. Trees are five to six feet high.

#### WILLOW (Salix).

Babylonica—Our common well known weeping variety; forms a large, round-headed, graceful tree; requires plenty of room, and where space can be spared, is quite desirable.

Kilmarnock (Caprea pendula)—A distinct variety, having reddish shoots and large, glossy foliage; grafted at a proper height, about five feet from the ground, it makes a very desirable small lawn tree, having a perfect umbrella shaped head, with the branches drooping gracefully to the ground. It is well suited for planting in cemetery lots or other small enclosures. Extensively planted, and should be in every collection of ornamental shrubbery. Hardy and of vigorous growth.

New American (Purpurea pendula) — An American dwarf variety, which, when grafted on a standard stem, five or six feet high, makes one of the most ornamental of small weeping trees, having long, slender shoots and delicate leaves of great beauty and very graceful.



## EVERGREENS (Coniferae).

Desirable in all ornamental planting as they retain their foliage through the winter, adding a tone of warmth and verdure, and imparting a charm to the land-scape that deciduous trees are incapable of. They should be judiciously planted on small as well as on large grounds. On the latter the larger kinds can arrive at full development, and should be planted at distances sufficient to allow of their natural and symmetrical growth without crowding. The Arbor Vitæs, Junipers, Dwarf Pines and Retinisporas, on account of their small size are most suitable for small lots; but nearly all species and varieties look well on small grounds while the trees are young.

Evergreens can be most successfully transplanted a short time before they are ready to start into growth, in the spring. The roots must not be exposed to wind or sun. The soil to receive them should be made mellow and fine, and great care taken that it is well-packed about the roots after they have been well spread out in their natural position.

For shelter and screens to break the wind; for concealing unsightly objects; for division lines or ornamental fence; for border to vegetable, flower gardens, etc., the different varieties are well adapted.

Our trees are all nursery grown, bushy stock with good roots.

In the following list we confine ourselves strictly to perfectly hardy species and varieties, such as are most useful for general planting. In transplanting Evergreens so much depends on the care of the planter in protecting roots from air and sun, that we cannot guarantee them further than that delivery shall be made in first-class condition. We recommend spring planting for Evergreens.

#### ARBOR VITAE (Thuja).

American (Occidentalis)—A well-known variety of great value; it forms an upright conical tree of only medium size and is, all things considered, the finest Evergreen for screens, being hardy and more easily transplanted. It grows rapidly, and with little care; or rather, by easy management, it soon forms a most beautiful hedge, very dense, and perfectly impervious to the sight. It is not adapted to turn stock, but forms a most desirable and ornamental screen to divide the lawn from other parts of the ground, or for any similar purpose.

Hovey's Golden (Hoveyi)—A hardy variety of rich golden shading.

Pyramidal (Pyramidalis)—Of upright, compact habit, resembling Irish Juniper; desirable.

Siberian (Siberica)—Well known and deservedly popular on account of its hardiness, being able to endure the changes of our climate, and as it retains its dark green color, it is an excellent lawn tree, and of great value for ornamental screens and hedges.

Tom Thumb—Remarkable for its low, compact habit; valuable for planting in cemeteries and small places where large trees are not admissible.

#### FIR (Picea).

Balsam (Balsamea)—A well-known and popular tree: very handsome while young, assuming the upright or conical form; leaves dark green above, silvery beneath; retains its color throughout the severest winters; grows rapidly, and every way desirable.

Concolor (Silver Fir of Colorado)—Without doubt the finest of the Rocky Mountain evergreens. Tree of graceful habit; broad, handsome foliage, bluish above, silvery beneath. A grand tree, very distinct and exceedingly rare as yet.

Nordmann's—A noble fir of majestic and symmetrical form, found on the Crimean Mountains. Hardy; one of the best evergreens.



IRISH JUNIPER.

#### JUNIPERS (Juniperus).

Irish —A very pretty little tree or shrub, forming a neat, tapering column of deep green foliage; very hardy and desirable for planting on lawns, or in cemetery lots, where larger evergreens are not admissible.

Red Cedar—A well known American tree; varies much in habit and color of foliage, some being quite stiff, regular and conical, and others loose and irregular. It makes a fine ornamental hedge plant.

Swedish—A small sized, handsome pyramidal tree, with bluish green foliage.

#### PINE (Pinus).

Austrian, or Black—From Central Europe, where it grows over one hundred feet high; remarkably robust, with long, stiff leaves and deep green foliage; hardy everywhere, and valuable for planting as wind-breaks, screens, etc.

Dwarf Mugho—An upright, small pine; found on the Pyrenees and Alps. Its general form is that of a pine bush, but it has been found growing as high as forty feet.

Scotch—A native of the British Isles. A fine, robust, rapid-growing tree, with stout, erect shoots, and silvery green foliage. Very hardy; valuable for shelter.

White—The most ornamental of all our native pines; foliage light, delicate or silvery green. Flourishes in the poorest light sandy soil. Very valuable.

#### RETINOSPORA. OR JAPAN CYPRESS.

A genus very similar to Cupressus. It comprises many sorts of wonderful beauty. They are natives of Japan and very few will endure the rigor of our winters without protection. Whenever they can be preserved they will amply repay the efforts made. The small varieties are exceedingly desirable for in-door culture in pots.

**Obtusa Compacta** (Obtuse-Leaved) — A beautiful variety, with glossy green leaves, silvery white underneath; hardy.

Pisifera (Pea Fruited)—An erect, slender growing tree, from Japan, graceful and handsome; resembling the Cypress in foliage; perfectly hardy.

Pisifera Aurea (Golden)—In this variety the tips of the branches are of a bright golden hue, very marked and pretty.

**Plumosa**—A variety with fine short branches and small leaves. The soft plume-like appearance of the foliage gives it its name.

Plumosa Aurea — One of the most striking and desirable little plants of recent introductions; habit of growth compact, with branches and leaves of beautiful golden yellow.

Squarrosa (Squarrose-Leaved)—A distinct variety, with slender branches, and very light bluish-green foliage; hardy and handsome.



COLORADO BLUE, OR ROCKY MOUNTAIN SPRUCE.

#### SPRUCE (Abies).

Colorado Blue, or Rocky Mountain (Picea pungens)—A magnificent evergreen from the Rocky Mountains. Very hardy; foliage a handsome blue,

Douglass (Douglassi)—Conical form, branches spreading. A very desirable variety.

Hemlock (Canadensis) — An elegant tree with drooping branches and fine yew-like foliage; perfectly hardy and quite distinct; of undoubted worth and beauty. Makes a fine ornamental hedge.

Norway (Excelsa) — Of very rapid growth and gracefully drooping habit when of some size; dense in structure, regular in outline, and perfectly hardy; will bear shearing or cutting well, and hence is well adapted for planting in hedges or screens. Very popular, and deservedly so, and is largely planted.

Weeping (Inverta) — A beautiful variety, somewhat resembling the Norway, except that its branches are pendulous. The lateral branches of large trees are as drooping as the Willow.

## HEDGE PLANTS.

To secure a good hedge it is necessary to plant well. Dig a wide, deep trench, and work the soil thoroughly into the roots. Stamp the ground firmly so that each plant will be set as solidly as a post, then mulch heavily with loose manure for a distance of one to two feet on either side, according to the size of the plants. This is especially necessary with Evergreens, and all exposure of the roots to the sun and air must be strictly avoided. Evergreens should not be planted in the Fall.



#### DECIDUOUS HEDGE PLANTS.

California Privet (Ligustrum ovalifolium)—This is the most glossy-leaved and rapid growing of all the half-evergreen plants used for low hedges around private lawns and is the universal favorite at Newport and other fashionable seaside resorts. Entirely hardy and adapted to all parts of the country. The best hedge plant ever introduced.

Honey Locust—Very hardy and the cheapest and the best for defensive hedges; also very ornamental.

CALIFORNIA PRIVET.

Japan Quince—Unquestionably the finest of all plants for an ornamental hedge. Grows very compact; will submit to any amount of pruning, while the brilliant and showy scarlet flowers make it exceedingly attractive.

0sage Orange - Highly esteemed at the West and South. Not hardy enough for the Northern States.

The following are also very desirable for ornamental hedging, description of which will be found under the proper headings in this catalogue:

Altheas, Berberry Purple, Honeysuckle Tartarian, Hydrangea Paniculata,

Roses, Spireas.

#### EVERGREEN HEDGE PLANTS.

All described in their appropriate places in this catalogue.

Arbor Vitae, American, Arbor Vitae, Siberian, Arbor Vitae, Tom Thumb, for borders, Box, Dwarf, for Edging, Hemlock Spruce, Norway Spruce (especially adapted for wind-breaks).



## FLOWERING SHRUBS.

We would urge the more extended use of shrubs for large and small grounds, combining, as they do, so wide a range of foliage and flower, habit of growth and season of bloom; and as they require small space for perfect development, the monotony of entirely blank lawns of even small size can be most advantageously broken and the ornamental effect highly increased by a judicious selection and arrangement into single specimen plants, small groups or masses, in proportion to the size of the grounds.

Our Shrubs are all strong, well-rooted, transplanted stock from open ground. Once carefully planted in suitable positions they increase in size and beauty from year to year, and require but little further care. The time of bloom of the different sorts extends over nearly the whole season, though the greatest show is to be expected in spring and early summer.

We can supply many Flowering Shrubs in addition to those described, but confine ourselves to those having the greatest merit, and especially to such as possess some distinct qualities, either of foliage or of flower.

Should any of our professional patrons desire to experiment on their testing grounds with varieties not named herein, we shall be pleased to fill such orders. But to the general planter we advise a selection from the following choice list:

#### ALMOND (Amygdalus).

Dwarf, Double Red-Flowered—A beautiful small shrub, bearing an abundance of small double rose-like flowers, in May, closely set upon twigs before the leaves appear.

Dwarf, Double White-Flowered—Produces beautiful double white flowers in May.

#### ALTHEA (Hibiscus).

Althea, or Rose of Sharon—One of the most showy and beautiful flowering shrubs. The flowers are of large size, very double and full, and of various brilliant and striking colors. It blooms freely during August and September when scarcely any other tree or shrub is in blossom

Double Pink. Double Purple. Double Red.

Double Rosea.—Pink and white.

Double White.-White with crimson center.

Variegated-Leaved Double Purple-Flowered (Flora plena fol. var.)—A conspicuous variety with leaves distinctly marked with light yellow, and having double purple flowers; showy and desirable.

#### ALTHEA, TREE FORM.

The Althea, as a shrub, is fine and attractive, but grown in tree form becomes doubly beautiful and interesting. It is hardy and of easy cultivation. Colors same as above. See cut, page 58.

AZALEA.

Ghent—This class is hardy and will thrive in any good, rich garden soil, but will do best in a light, moist soil, in which a liberal quantity of leaf-mould is mixed. Colors, orange, pink, red, white, yellow.

Mollis—A beautiful species from Japan; perfectly hardy, with large flowers and varied in color. The colors run through all shades of orange, yellow and carmine.

#### BARBERRY (Berberis).

Purple-Leaved—An interesting shrub, growing three to five feet high, with violet purple foliage and fruit; blossoms and fruit beautiful; very effective in groups and masses, or planted by itself.

Thunbergii (Thunberg's Barberry)—From Japan. A pretty species, of dwarf habit, small foliage, changing to a beautiful red in autumn, making it very attractive.



TREE ALTHEA.

(From a specimen on our grounds.)

#### CALYCANTHUS, OR SWEET-SCENTED SHRUB.

This is very desirable on account of the peculiarity and very pleasing fragrance of its wood; its foliage is rich; flowers of a rare chocolate color, with an agreeable odor. The Calycanthus blossoms in June and at intervals through the summer; very desirable. When full grown, six to eight feet.

#### CLETHRA, OR SWEET PEPPER BUSH.

Alnifolia—Very hardy; blooms every season without fail; cold never harms it; flowers pure white, in spikes three to six inches long. A bed of Clethras will perfume the air for a long distance around. A single sprig will fill a room with its delightful fragrance. It is a neat, upright-growing shrub, and is not only valued for its beauty and sweetness, but is now in demand for the honey-bee to feed upon. The honey is almost white, thick and of fine flavor. The plant is very easy of cultivation; never fails to bloom after a hard winter, and is worthy of a front place in every garden.

#### CORNUS, OR DOGWOOD.

Mascula (Cornelian Cherry) — A small tree, producing clusters of bright yellow flowers, early in spring before the leaves.

Mascula Var. (Variegated Cornelian Cherry)—Foliage beautifully variegated with white; one of the prettiest variegated shrubs in cultivation.

Red-Branched (Sanguinea)—A native species, very conspicuous and ornamental in winter, when the bark is blood red.

Variegated-Leaved Red-Branched (Elegantissima Var.)—This variety of the well known red Dogwood has silver margined leaves, which render it a very showy shrub. We consider it to be an addition of great merit.

#### CURRANT (Ribes).

Double Crimson-Flowering (Flore pleno)—Flowers in July; very pretty.

Gordons (Gordonianum)—Flowers crimson and yellow in May; very hardy and a profuse bloomer.

Yellow-Flowering (Aureum)—A valuable variety producing small yellow flowers in early spring. Blossoms have a delicate spicy fragrance.

#### DEUTZIA (Deutzia).

This valuble plant comes from Japan. Its hardihood, fine habit, foliage, and beautiful flowers, render it the most popular of flowering shrubs. Flowers are produced in long racemes during the later part of June.



LEMOINE.

Crenata—Flowers double; white tinged with rose.
One of the finest flowering shrubs in cultivation.

Gracilis (Slender-branched) — A charming species; flowers pure white. Fine for pot culture and cemetery planting. Of dwarf habit.

Lemoine—Flowers pure white, borne on stout branches of upright growth. Dwarf and free flowering. Although comparatively new is already very popular.

Pride of Rochester—A variety raised from the double-flowered and producing large, double white flowers, the back of the petals being slightly tinged with rose. It excels all of the older sorts in size of flower, length of panicle, profuseness of bloom and vigorous habit, and blooms nearly a weak earlier than the parent.

Scabra (Rough-leaved)—One of the most beautiful profuse flowering shrubs; flowers single white.

#### ELDER (Sambucus).

A large, showy shrub, blossoming in June. Requires frequent pruning. Cut-Leaved (Laciniata)—One of the best cut-leaved shrubs.

Golden (Aurea)—From Holland. New and rare. When the leaves first appear they are bright green, but if planted where they will have plenty of sun they soon change to a golden green. The blossom, which resembles the common Elder bloom, appears in July. The best effect is produced when they are planted with other shrubs, thus rendering the foliage more conspicuous by the contrast.

#### ELEAGNUS.

Longipes—This is a remarkably beautiful new shrub from Japan. In July the plant is covered with bright red berries of large size and edible, the flavor being pungent and agreeable. Laden with fruit the bush is highly ornamental, and the fact that its leaves remain fresh till late in the autumn gives it additional value for garden decoration.

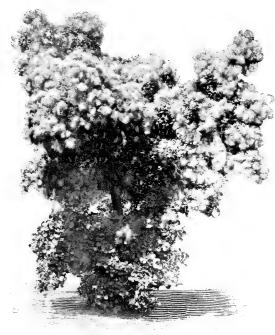
#### EXOCHORDA, OR PEARL BUSH.

Grandiflora—From Northern China. The plant is entirely hardy, enduring from 20° to 30° below zero without the slightest injury. It is a vigorous growing shrub, forming a neat compact bush ten to twelve feet high; can be trimmed into any desired shape. Flowers pure white, borne in slender racemes of eight to ten florets each.

#### FILBERT (Corylus).

Cut-Leaved-A very ornamental shrub, with deeply cut foliage.

Purple-Leaved—A very conspicuous shrub, with large, dark purple leaves. Distinct and fine.



PURPLE FRINGE, OR SMOKE TREE.

# FORSYTHIA, OR GOLDEN BELL.

This is a pretty shrub of medium size. Native of China and Japan. The flowers are drooping, yellow, and appear very early in spring, before the leaves. The best very early flowering shrub.

#### FRINGE.

Purple Fringe, or Smoke Tree (Rhus Cotinus)—A small tree or shrub, very much admired on account of its peculiar fringe or hair-like flowers, covering the whole surface of the bush in midsummer.

White (Chionanthus Virginica)
—One of the finest shrubs
with large leaves and racemes of delicate fringe-like
greenish-white flowers, in
May and June.

# HONEYSUCKLE, UPRIGHT (Lonicera).

The following species and varieties are of erect, shrubby habit, and form beautiful specimens when properly trimmed.

Fragrantissima—A spreading shrub with deep green foliage and very fragrant small flowers, which appear before the leaves; foliage almost evergreen; most desirable. Red Tartarian—Pink flowers, which contrast beautifully with the foliage. June. White Tartarian—High bush, with creamy-white, fragrant flowers. May and June.

#### HYDRANGEAS.

Beautiful free flowering shrubs, bearing immense panicles or trusses of flowers. Paniculata is perfectly hardy and requires no protection; the other varieties require protection in winter and should be grown in pots or boxes and wintered in the cellar.

Otaksa—A splendid variety from Japan. Flowers large, bright pink, tinted with blue; produced very freely.

Paniculata Grandiflora-This is one of the most valuable hardy shrubs. It attains a height of three or four feet, and is perfectly hardy in all parts of the country. The flowers are white, borne in immense panicles nearly a foot in length. It commences flowering in July and continues until November. The plant should be cut back every spring at least one-half of last season's growth as the flowers are borne on new wood and are much finer when the plant is treated this way. An excellent shrub for cemetery planting.



HYDRANGEA PANICULATA GRANDIFLORA.

Red-Branched—A grand variety, producing flowers in immense sized trusses. Color very deep rose or light cherry.

Thomas Hogg—Immense trusses of flowers, at first slightly tinged with green, becoming of the purest white, and remaining so a long time.

Tree Hydrangea (Paniculata Grandiflora)—In tree form. Beautiful as a shrub they are grandly beautiful as a tree, growing in loveliness as they acquire age and size. It is recognized wherever known, and in all latitudes, as decidedly the finest acquisition to the list of hardy shrubs made in the past twenty years. It is as hardy as a native oak, and produces at the ends of the branches great masses of flowers, the individual clusters often being nearly a foot in length. Unequaled for lawns and cemeteries, and appropriate everywhere. Give it a trial and you would not part with it for THREE TIMES ITS COST. Our stock is well grown and of extra size, and with care should bloom the first season. The hydrangea grows from eight to ten feet high, with large, showy, handsome green leaves, and bearing immense cone-shaped heads of pale green flowers, changing to nearly pure white, and again to varying shades of pink and red, produced in August and remaining until cut off by severe frosts. Should have rich soil and plenty of moisture to produce best results.

#### LILAC (Syringa).

Well-known and beautiful hardy shrubs; very ornamental in the spring; flower in May.

Charles X — Magnificent clusters of dark red flowers, produced in the greatest profusion. A splendid variety.

Chinese Weeping (New)—
A beautiful weeping tree; produces large clusters of beautiful intensely sweet flowers. A great acquisition.

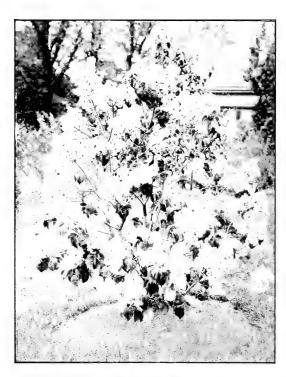
Common Purple—Bluish purple flowers.

Common White — Creamcolored flowers.

Frau Dammann—This produces the largest clusters of white lilacs, of the common species known in cultivation, and also the purest white. Highly desirable.



CHINESE WEEPING LILAC.



FRAU DAMMANN.

Japan Tree — A remarkable new species from Japan, becoming a good sized tree; foliage dark green, glossy; flowers small, feathery, but formed in great panicles often eighteen inches long, very light straw color; blooms a month later than other lilacs.

Josikea—A species found in Transylvania; leaves long, wrinkled; flowers blue.

Leon Simon - Thyrses, attaining 14 inches in circumference; 4-parted; compact; crowded and packed with blossoms. These flowers, which are piled one on another, are very double, and perfectly round; color bluish crimson; buds, clear coral. The whole appearance of the cluster produces the effect of a lot of wall-flowers joined together. This plant is altogether extraordinary, and has nothing to resemble it, in point of beauty, either among single or double lilacs.

Ludwig Spacth-This is, without doubt, the most beautiful variety of the old purple lilac ever produced. The single blossoms, as well as the clusters, are very large, and of a splendid dark purple red color, not only as buds, but even when the blossoms are fully expanded.

President Grevy — Magnificent spikes, of an amplitude unknown before in single lilacs, attaining more than a foot in length, with proportionate width, individual flowers over an inch, with two or three rows of rounded petals of a cobalt blue, with the centers more brilliant and the edges rosy; these reversed edges make the fine blue of the centershow strongly by the contrast.

Villosa—Another new species from Japan. Large branching panicles; flowerssingle, light purple in bud, white when open; fragrant; foliage resembles White Fringe. Especially valuable, as its flowers appear two weeks after those of other lilacs.



PRESIDENT GREVY.

We also have the following recently imported new varieties in stock:

Alex. Humboldt—Double rosy purple.

Alphonse Lavelle-Violet blue.

Belle de Nancy - Semi-double light blue.

Cassimir Pereire—Double white.

Chas. Joley—Reddish purple.

Colemanense-Deep blue.

Csse. Horace du Choiseul-Creamy white.

De Jussier-Double reddish blue.

Dr. Lindley - Purplish lilac.

Dr. Naillot - Semi-double lavender.

La Mauve-Double lavender.

Lemoineii—Double reddish purple.

Lilarosea-Rosy lilac.

Linne—Double reddish lilac.

Louis Henry-Double dark pink.

Mad. Abel Chatenay—Double white.

Mad. Briot—Double rose.

Michael Buckner—Double lilac.

Monument Carnot - Double lavender.

Nal. de Bossompierre—Double white.

Oblata—Early purple.

Pres. Carnot-Double flesh.

Prince de Beaureau-Double lilac.

Prince of Wales-Purplish lilac.

Pubescens - Reddish lilac.

Souv. de Louis Thebault-Double light red.

Verschafeltii-Light purple.

Virginite—Double tender rose.

Volcan - Deep red.

Vulgaris Congo-Dark red.

#### PLUM (Prunus).

Double-Flowered (Prunus Triloba)—Native of China. A highly interesting and desirable addition to hardy shrubs; flowers double, of a delicate pink, upwards of an inch in diameter, thickly set on the long, slender branches; flowers in May.

Purple-Leaved (Prunus Pissardi)—The finest purple-leaved small tree or shrub of recent introduction. The young branches are a very dark purple; the leaves when young are lustrous crimson, changing to a dark purple, and retain this beautiful tint till they drop late in autumn; no other purple-leaved tree or shrub retains its color like this. It transplants easily and is worthy of wide dissemination. Flowers small, white, single, covering the tree.

#### QUINCE (Cydonia).

There are several flowering varieties, differing only in their color. Although of straggling growth, they can be pruned to desirable shapes without injury. Their large brilliant blossoms appear early in the spring in great profusion. Foliage bright green and glossy all through the summer. It is sufficiently thorny and strong to make a valuable hedge, and its beautiful flowers make it very handsome for that purpose. Scarlet (Japonica)—One of the best known; and a very handsome, hardy ornamental

shrub.



JAPAN SNOWBALL.

#### SNOWBALL, OR ARROW ROOT (Viburnum).

Common, or Guelder Rose (Sterilis)—The well-known sort, and a general favorite on account of its large clusters of white flowers in June. Very handsome and desirable, and should be in every collection.

Japan (Viburnum Plicatum)—A rare and exceedingly beautiful species from Japan, surpassing the Common Snowball in many respects, as its habit is much better, foliage much handsomer, flowers whiter and more delicate. Very valuable.

Tree Japan—The beautiful Virburnum Plicatum grown in tree form. Very hand-some and desirable.

#### SNOWBERRY (Symphoricarpus).

Racemosus—A well-known shrub with pink flowers and large white berries that remain on the plant through part of the winter.

Vulgaris (Indian Currant, Coral Berry)—Graceful, small shrub, small flowers followed by persistent deep-red berries along the underside of branches.



SPIREA ARGUTA.

#### SPIREA, OR MEADOW SWEET.

Hardy and easily grown; of low growth, requiring but little room; long bloomers; in season about three months.

Anthony Waterer—A beautiful variety with broad heads of deep pink flowers. Grows two to three feet high, making a shapely bush. Blooms almost continuously from June throughout the season.

Arguta—Dwarf; flower clear white. Best very early flowering Spirea.

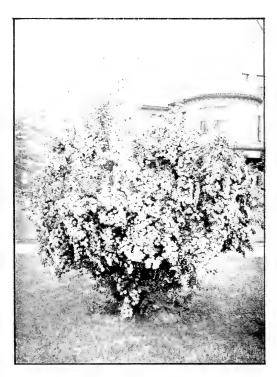
Billardi—Rose-colored; flowers in spikes; blooms nearly all summer,

Callosa (Fortunei)—Very fine and distinct, having bright, rose-colored flowers, in flat clusters, blossoming throughout the summer.

Callosa Alba—A dwarf variety of the above, having pure white flowers in the greatest profusion. Very desirable on account of its dwarf habit and free flowering; keeps all summer.

Golden (Aurea)—This is one of the most effective shrubs for a lawn; foliage green, bordered with rich golden yellow; very distinct and beautiful, particularly in June, when the branches are covered with a double white flower.

Lance-Leaved, Double (Lanceolata flore pleno)—A variety having double white flowers; distinct and desirable.



SPIREA VAN HOUTTE.

### Prunifolia, or Bridal Wreath-

Very desirable, having double, daisy-like flowers of pure white in the greatest profusion. Very hardy and in every way desirable, as it keeps in flower a long time.

Reevesii—A charming shrub, with narrow, pointed leaves, and large round clusters of white flowers that cover the whole plant.

Thunberg's (Thunbergii)— Extremely neat and graceful in its habits; dwarfish and rounded; drooping branches; narrow, yellowish green foliage; white flowers, early in spring. One of the best and deserves a place everywhere.

Van Houtte—The grandest of all the Spireas; it is a beautiful ornament for the lawn at any season, but when in flower it is a complete fountain of white bloom, the foliage hardly showing. Clusters of twenty to thirty flat white florets make up the raceme, and these clusters are set close along the drooping Perfectly hardy, stems. and an early bloomer.

#### STRAWBERRY, OR SPINDLE TREE (Euonymus).

Red—This is a very beautiful small tree, or shrub, when covered with its red berries through the winter.

White (Fructu albo)—Similar to the Red, having white fruit; when planted with the Red it forms a pleasing contrast.

#### SUMACH (Rhus).

Cut-Leaved—A decidedly attractive shrub of moderate size, with deeply cut leaves, almost fern-like in appearance; foliage turns to a rich crimson in autumn.

#### SYRINGA, OR MOCK ORANGE (Philadelphus).

Common, or Fragrantissima—An invaluable shrub of vigorous habit, very hardy, with large, handsome foliage, and beautiful white flowers, produced in the greatest profusion at the blossoming season. Flowers in June after the Weigela.

Double-Flowering (Flore pleno)—Very fragrant.

Dwarf (Nanus)—Rarely produces flowers.

Golden-Leaved (Aurea)—A very pretty plant of medium size, with golden yellow foliage. It keeps its color the entire season, and will be found valuable for creating pleasing and striking contrasts with purple-leaved shrubs. Very effective in masses.

#### TAMARIX.

This is a hardy shrub, with small leaves, similar to the Juniper; the flower is small and delicate and borne in spikes; does well by the seaside, where other plants cannot live.

Africana—Flowers in May; very handsome foliage.

Chinensis-Rose-colored, flowers in Sept.

#### WEIGELA (Diervilla).

Very desirable, hardy, easily grown and great bloomers. As these shrubs grow older they gradually spread and droop; flower in June and July; in borders and groups of trees they are very effective; bloom after lilacs in June. The following are the most desirable varieties:

Amabilis—Of robust habit, large foliage and pink flowers, blooms freely in the autumn; distinct and beautiful.

Candida—This is the very best of all the white flowering Weigelas. A strong, upright, erect grower; flowers pure white and produced in great profusion in June and continues to bloom through the entire summer.



SYRINGA, OR MOCK ORANGE.

Eva Rathke—A charming new Weigela, flower brilliant crimson; a beautiful distinct, clear shade, producing two and sometimes three crops of blossoms in a season.

Floribunda—A fine variety, flower dark red. A profuse bloomer.

Hortensis Nivea—Flowers pure white, retaining their color, and being clear enough for the choicest bouquets; foliage large, habit vigorous, and a profuse bloomer. Very distinct and desirable.

Rosea (Rose Colored)—A hardy and beautiful shrub, bearing in May a profusion of rose-colored flowers. Introduced from China, and justly considered one of the finest shrubs we have.

Variegated-Leaved—Very desirable on account of its finely variegated foliage, which is yellowish white; lasts the entire season, and contrasts finely with its rose-colored flowers.

#### XANTHOCERAS.

Sorbifolia (Chinese Chestnut)—A large growing shrub from Central China, foliage resembling that of the Service Tree, or Mountain Ash. Flowers white, copper colored at base of petals, in racemes about eight inches long; flowers expand in early spring with the leaves. Should be severely pruned when transplanted.

## CLIMBING AND TRAILING SHRUBS.

The Climbing Shrubs are useful to adorn and embellish the yard and grounds, and to hide whatever may be unsightly, and when trained over verandas, arbors and trellises they, or so many of them as can be well located, cannot fail to challenge admiration by the beauty of their flowers and the elegance of their foliage. They are all desirable where space and time can be given to their culture.

#### ACTINIDIA.

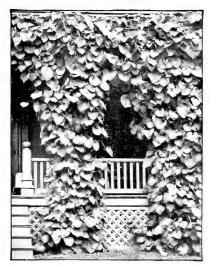
A climbing plant from Japan. The flowers are white with a purple center, and sometimes cover the whole vine. The fruit is round, edible, and has a fine flavor. Foliage dark green, handsome.

AKEBIA.

Quinata—A singular Japanese climbing shrub, with fine foliage, purple flowers and ornamental fruit.

AMPELOPSIS.

American Ivy, or Virginian Creeper—Has beautiful digitate leaves that become rich crimson in autumn. A very rapid grower. Like the ivy, it throws out roots at the joints, by which it fastens itself to anything it touches.



DUTCHMAN'S PIPE.

Veitchii, or Japan Ivy (Boston Ivy)-Leaves smaller than those of the American, and overlap one another, forming a dense sheet of green. The plant is a little tender while young, and requires protection the first winter; but once established, there is no further risk. It grows rapidly and clings to the wall or fence with the tenacity of ivv; the foliage is very handsome in summer, and changes to crimson scarlet in autumn. For covering walls, stumps of trees, rockeries, etc., no plant is so useful. For the ornamentation of brick and stone structures, it can be specially recommended.

ARISTOLOCHIA (Birthwort).

Sipho (Dutchman's Pipe)—A native species, of climbing habit and rapid growth, with magnificent light green foliage 10 to 12 inches in diameter, and curious pipe-shaped, yellowish brown flowers.

BIGNONIA, OR TRUMPET FLOWER.

A vigorous and hardy climber, with clusters of scarlet trumpet-shaped flowers in August.

#### CLEMATIS.

None among hardy perennials exceeds in beauty and effectiveness the finer sorts of Clematis. As a climber for the veranda, a screen for fences, for pillars along the garden walks, for training on walls or arbors, in masses on rockwork or cultivation in pots, it has no rival among the strong-growing, blossoming plants. The Clematis should be grown in rich, deep, sandy loam, and be well mulched with rotten manure in winter. The richest sheets of bloom and largest flowers are obtained where it has partial shade and a liberal supply of water at the roots. After many years' experience we have come to the conclusion to grow only a few varieties which have proved worthy of general cultivation.

Baron Veillard—A superb new sort, with large flowers of bright pink.

Coccinea - Very hardy: bears thick, bell-shaped flowers, bright red coral; blooms very profusely during June until frost. One of the best of the older sorts. Valuable for foliage, being a peculiar green and elegantly cut and variegated.

Crispa—Very hardy and a free bloomer; flowers blue, with center of petals an opaque white: very fragrant; useful for festooning.

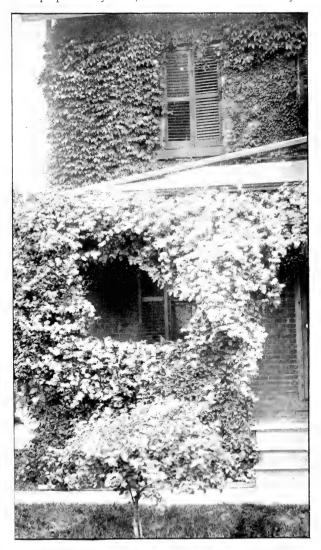
Duchess of Edinburgh—The best of the double pure whites. Deliciously scented. Henryii — One of the best perpetual hybrids; of robust habit and a very free

bloomer. The flowers are white, large and very showy. July to October

Jackmanni - This is perhaps the best known of the newer fine perpetual Clematis, and should have credit of the great popularity now attending this family of beautiful climbers. The plant is free in its form of growth. and an abundant and successional bloomer, producing flowers until frozen up. The flowers are large and of intense violet purple, re-markable for its velvety richness.

John Gould Veitch— Sent from Japan in 1862. The flowers are very handsome, distinct, large, double, and of a light blue or lavender color

Kermesina Splendida —A splendid varietv of the utmost profusion o f bloom: flowers of medium size and of bright wine-red color, without a touch of purple. A strong, free grower, producing shade in comparatively short time; a perfect sheet of fine red color.



CLEMATIS PANICULATA AND AMPELOPSIS VEITCHII. (SPECIMEN ON OUR GROUNDS.)

Lawsoniana—A hybrid variety; showy and free, with very large, beautiful rosy-purple flowers, which are produced profusely and in continual succession. July to Oct.

- Lucie Lemoine New; flowers white, double, large, and well formed; composed of seventy-five to ninety petals; very showy. June.
- Mad. Ed. Andre—This is the nearest approach to a large red clematis and has been called the Crimson Jackmanni. The plant is a strong vigorous grower and very free in bloom. Color a distinct crimson red; a very pleasing shade and entirely distinct from all other varieties.
- Montana—A remarkably free-growing, exceedingly ornamental, hardy Indian climber, well adapted for trailing over walls or trellises. The flowers are white, with a dash of pink and tuft of straw-colored stamens. Sweet-scented and very copious, the branches literally becoming converted into floral garlands.
- Paniculata (A new sweet-scented Japan Clematis)—A Japanese plant possessing unusually attractive merits. A vine of very rapid growth, quickly covering trellises and arbors with handsome, clean, glossy green foliage. The flowers are of medium size, pure white, borne in immense sheets, and of a most delicious and penetrating fragrance. These flowers appear in September, and at a season when very few other vines are in bloom. The extreme rapidity of its growth, the showy foliage, beautiful and fragrant flowers borne so very freely, and its late blooming nature, united with an entire hardihood, serve to make this one of the very choicest of recent introductions. (See cut, page 69.)
- Prince of Wales—This is one of the very profuse flowering varieties; of vigorous habit; showy and free. The flowers are of deep purple with a red bar in the center of each flower leaf. First-rate for bedding as well as training up. July to October.
- Ramona—This magnificent new Clematis is an American seedling, and consequently extremely hardy. The Ramona is a strong, rampant grower, fully three times as strong as the Jackmanni, often growing ten or twelve feet the first season. It is a perpetual bloomer, giving an abundance of flowers through the season. In color it is a very deep sky-blue, distinct from any other kind, and very attractive.
- Virginiana—A very strong grower, having fragrant white flowers. Valuable for covering screens.

## HONEYSUCKLE (Lonicera).

This includes some of the most desirable climbing plants that can be used for covering arbors and porches.

- Chinese Twining (Japonica)—A well-known vine, which holds its leaves nearly all winter. Blooms in July to September, and very sweet.
- Hall's Japan (Halleana) An almost evergreen variety, with pure white flowers, changing to yellow; very fragrant and a vigorous grower. Covered with flowers from July to December. Best blooming of all.
- Golden-Leaved (Aurea reticulata)—A Japanese variety; moderately strong grower, with leaves veined and spotted with bright golden yellow.
- Monthly Fragrant (Belgica)—Flowers red and pale yellow; sweet scented; blooms through the summer.
- Scarlet Trumpet (Sempervirens)—Flowers deep red, trumpet-shaped; flowers all summer; a native climber and appropriate for trellises and rockwork. One of the handsomest.

#### MATRIMONY VINE (Lycium).

Chinese—A superb variety, which has been a favorite for many years. It is a most vigorous, hardy climber in any position. It continues flowering, and new berries are forming from late spring until frost. The berries remain on the vine until late into the winter. Beautiful and easy of culture.

#### WISTARIA.

- American (Magnifica)—Resembles the Chinese in general appearance, but the flowers are smaller and paler.
- Chinese Purple (Sinensis)—One of the most magnificent hardy climbers, producing racemes of pale purple flowers early in spring and autumn, and growing at the rate of fifteen or twenty feet in a season, attaining an immense size.
- Chinese White (Sinensis alba)—Introduced from China. A beautiful climber, differing from the above only in color, being a pure white.
- Double Purple—New and very desirable; superior to any of the preceding.

## EVERGREEN SHRUBS.

#### BOX (Buxus).

Dwarf (Nana)—The well-known sort used for edging.

Tree Box (Sempervirens)—A shrub of the largest size, succeeding well in the shade.

#### DAPHNE.

Cneorum—A beautiful evergreen shrub with fragrant pink flowers. Blossoms in June and October.

ILEX OPACA (Holly).

American Holly—Deep green, glossy leaves with scattered spiney teeth, bright red berries.

#### MAHONIA.

Holly-Leaved (Aquifolium)—A beautiful Holly-like shrub, with showy, golden yellow flowers and purplish leaves. Very ornamental.

#### MOUNTAIN LAUREL (Kalmia).

Latifolia —Broad, glossy-green, shining foliage, flowers in large and showy clusters of elegant shape, and most beautifully colored. Few broad-leaved evergreens are as beautiful in foliage, and none can excel the beauty and delicate form of its flowers.

#### RHODODENDRON, OR ROSEBAY.

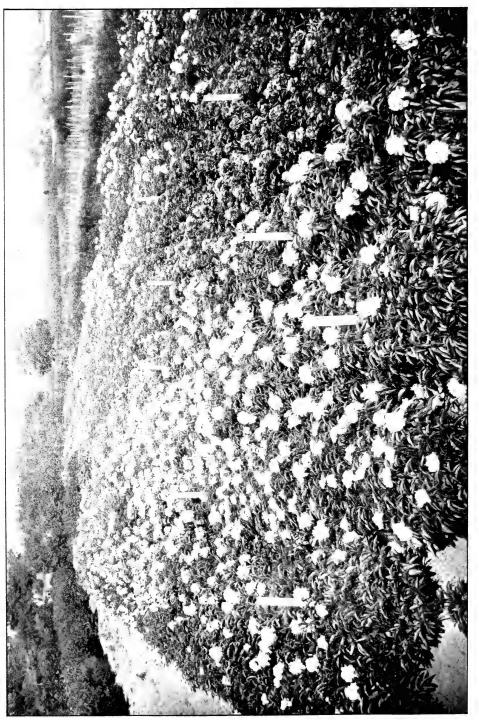
This, wherever known, is universally acknowledged to be the most showy. magnificent hardy evergreen shrub that grows. It will thrive in any good soil without any special preparation, and in the full blaze of the sun. But it is more luxuriant in good, well prepared soil of leaf mould, or leaf mould and muck and peat mixed, and in partial shade. It is abundantly supplied with numerous fibrous roots that retain a quantity of earth in lifting, so that it can safely be removed at any season of the year, except the short period of their rapid growth, covering a portion of June and July. The broad thick evergreen foliage, with its glossy richness, would alone entitle it to a place foremost in the rank of evergreen shrubs, but when in June this mass of luxuriant foliage is almost hidden by the magnificent array of beautiful flowers in clusters and each cluster large enough for a lady's bouquet, it gives it a pre-eminence that our pen would fail to portray. Planted singly, in the flower garden or upon the lawn, they are objects of interest, but their greatest beauty, as in many other plants, can only be fully developed by artistically massing them in beds upon the lawn, when the different varieties, of white, blue, purple, cherry, lilac, mauve and crimson, can be made to blend or contrast at will, producing an effect unrivalled by any other hardy plant in existence. We have in addition to the seedlings of the Catawbiense, a considerable list of the hardy grafted varieties that are of higher price and more desirable, as they compass in the different sorts the entire range of colors, and each in itself distinct and definite, while the seedlings, as a rule, vary but little from the original type. When soils are too strongly impregnated with lime, the original soil should be removed to a good depth and width where the Rhododendrons are to be planted and the space filled in with leaf mould and peat or muck mixed, or some other soil tolerably free from lime.

#### Hardy Hybrid Rhododendrons.

Alexander Adie Atrococcineum Blandyanum Boule de Neige	bright cerise, good trusses, fine scarlet. bright crimson, fine, the best of all white varie-
Caractacus	ties, pure white, very fine, red. double flowering. fine white. rosy crimson, with large
Lady Clermont Mrs. Milner Mrs. R. S. Holford	yellow marks rosy scarlet, deeply bl'ch'd. rich crim'n, splendid habit, rich salmon crimson, large truss, fine.
Princess Louise (Linden) Sigismund Rucker The Queen The Warrior Von Siebold	pure white, very fine, early, purple, very dark spots. white. bright dark red, purplish crimson.

## Parson's Hardy Catawbiense Rhododendrons.

A. Lincoln .		crimson.
Album elegans		white.
Album grandifloru	m	white.
Anna Parson .		soft red.
Betsy Parson .		reddish purple.
Catawbiense grand	iflora	purple.
Catawbiense grand Everestianum .	iflora	purple. rose.
0	iflora	
Everestianum .	iflora	rose.
Everestianum . General Grant	iflora	rose. bright red.



## PAEONIES.

## CLASS I.—PAEONY MOUTAN (Tree Paeonies).

Moutan is a native of China. With proper care they grow into handsome shrubs four to five feet, but this requires some time. They bloom very early in May; the plants are hardy, yet give better results if protected in winter.

Chinese Double-Blush (Banksii)—Flowers are very large, often measuring six to nine inches; very fragrant, rosy blush. Flowers in great profusion.

#### CLASS II.—HERBACEOUS PAEONIES.

These contain the largest, most showy and attractive flowers in cultivation, almost rivaling the rose in color and bloom. They are of stately growth, very hardy, and delightful when in bloom. At the present time they are very fashionable; the public beginning to appreciate the many fine varieties of recent introduction, ranging from pure white through the different shades of pink, rose, variegated, purple, etc. They increase in beauty with age, and may be planted in almost any situation. We recommend fall planting. They succeed best in *rich* soil and will be benefited by a mulch of rotten manure during the winter which may be lightly spaded into the soil in spring. Our collection is par excellence and we think the best attainable.

#### FIRST DIVISION (Paeony Officinalis).

This division contains the earliest flowered varieties.

Alba Plena (Mutabilis)—Pink, changing to white when fully opened.

Fringe Leaf (Tenuifolium flore pleno)—Double; bright scarlet crimson, globular flowers. Foliage finely cut and very ornamental. This is the earliest of all the herbaceous pronies to bloom.

Rosea—Double crimson, changing to rose; fragrant; fine.

Rubra—Double crimson; large and fragrant.

# SECOND DIVISION (Chinese Paeonies).

Agida—Semi-double, dark red, with yellow anthers.

Alba Lutea—White with yellow center; very large and fine.

Alba Siberica—Flesh white with yellowish white center. Late.

Alexander Dumas—Bright rose; large and fine. One of the best.

Amabilis Lilacina—Deep pink; very double.

Anemonaeflora—Outer petals pink with a light pink center. Late.



FRINGE LEAF PÆONY.

Antoine Poiteau-Light flesh, changing to white.

Belle of France-Bright pink; very large and fine; good form.

Bicolor-Pink rosette, with a yellowish white center.

Carnea Alba—Flesh white; large; extra fine.

Carnea Elegans-Light red; fine flower. Late.

Chas. Grosselin-Purple. The center petals are very narrow; fine and very distinct.

Chrysanthemumiflora—White, with yellow center. This is the most yellow pæony we have.

Comte de Cusse-Flesh rose.

Delachii - Dark purplish crimson; shaded violet.

Delachour Verhille—Cream, changing to white.

Duch. de Nemours-Light rose; pink center.

Duke of Wellington-White and yellow.

Elegans-Pink; large and full; extra fine.

Emperor William-Dark purplish red; very large.

Faust-Blush white.

Faustii-Pink, with salmon and pink center.

Festiva--White, with a few marks of carmine in the center.

Festiva Maxima—Very large, snow white; some of the center petals are tinged with carmine; fragrant, extra fine.

Flavescens—Semi-double, purplish red; profuse bloomer. Late.

Fragrans-Violet rose; very full and sweet.

Fulgens-Single red, with large yellow anthers.

Fulgida—Crimson purple; profuse bloomer.

Gen. Cavignac—Flesh rose.

Grandiflora Rosea-Light rose.

Grandiflora Rubra—Dark purplish red; late; very good.

Humea Alba—Dark pink, with sharp-toothed salmon petals in center; distinct.

Incarnata—Pure white; extra fine; early.

Irma-Rose, tinted flesh; yellow center.

Jeanne d'Arc-Flesh white; salmon center.

Lilacina-Lilac rose; late; very fine.

Lilacina Plenissima—Pure white; flowers small.

Lilacina Superba—Light lilac.

Lilacina Superbissima—Light rose; semi-double.

Louis Van Houtte-Purplish crimson; very compact and showy.

Lucrece-Peach; center petals short and white.

Lutea Plenissima—Flesh, sulphur center.

Mad. Furtado—Deep rose, tinted lilac. Very early.

Magnifica—Delicate pink changing to white.

Modeste—Pink; very large and showy; fragrant.

Mutabalis—Bright rose; fine form; early.

Nivalis—Sulphur white, tinged with carmine.

Nivea Plenissima-White; creamy center; fine.

Odorata-Dark pink rosette which changes to light pink with age.

Philomela - Outer petals white, tinged with pink; yellowish center.

Pottsii Alba-Large white, with carmine spots.

Pottsii Superba-Pink, with light pink center.

Princess Galitzen-Flesh, with yellowish white center.

Prolifera Tricolor-White, center yellow.

Purite-Large, pure white. Good form.

Purpurea—Purplish crimson; good shade, tall and showy.

Reine de Francaise-Flesh white.

Rosacea Splendida—Very light pink, with narrow yellowish white petals in center.

Rosea Versicolor-Silvery pink.

Rubicunda-Light red; large and full.

Smitzii-Single red, with yellow anthers.

Solfaterre-White, with yellowish tinge; globular; distinct.

Splendida-Yellowish white rosette tinged with carmine.

Triomphe de Gand—Pink pearly center.

Triomphe du Nord-Violet rose, shaded lilac.

Van Houtte-Outside petals rose; center salmon, changing to white; distinct.

Vicomtesse Belleval—Purplish crimson; semi-double, showing the yellow anthers.

Victoria Modesta—Guard petals, rose; center, salmon and pink changing to white.



## HARDY HERBACEOUS FLOWERING PLANTS.

The following collection embraces the most desirable species and varieties. They are all showy and beautiful plants, of easy cultivation, and of various seasons of flowering from May to November. By a judicious selection a continuous display of flowers may be obtained from early spring to the end of autumn. Parties in ordering will do well to leave the selection to us. The size indicated is the height attained by the different plants.



ANEMONE.

#### ACHILLEA (Yarrow, or Milfoil).

The various species grow from eighteen to twenty-four inches high. Flowers red, white and yellow, in flattish or corymbose heads, from June to August.

The Pearl-Small, double white flowers, covering plant in July. Invaluable for borders. One of the prettiest flowering plants and should be in every garden.

#### ALTHEA ROSEA (Hollyhock).

A collection of fine double sorts, of several colors.

#### ANEMONE (Wind Flower).

Japonica—A distinct and beautiful species; flowers 2½ inches in diameter; bright purplish rose, with golden yellow centers, borne in great profusion from September to November. Height 2½ feet; habit neat and compact; very desirable and effective as a pot plant, and in lines or masses, in beds or mixed borders.

Queen Charlotte—A new variety producing double rose colored flowers in great profusion in the autumn. Very valuable.

Whirlwind—A variety producing double white flowers in great profusion in the autumn. One of the finest fall-flowering perennials. Hardy.

White —A distinct and beautiful variety of the Japonica; flowers 2½ inches in diameter; pure white, center golden yellow, borne in great profusion from September to November; very desirable and effective as a pot plant, and in lines or masses, in beds or mixed borders.

#### ANTHEMIS (Chamomile).

Yellow (Hardy Golden Marguerite)—Flowers golden yellow, one to two inches across, from July to November; valuable. Twelve to eighteen inches.

#### ARUNDO (The Reed).

Invaluable for creating tropical aspects in a garden.

Donax (Great Reed)—A handsome reed, growing from ten to fifteen feet high. Its attractive foliage renders it very effective on lawns.

Donax Variegated—A magnificent variety of the preceding; leaves beautifully striped with white; six to eight feet.

#### ASTILBE (Japan Spirea).

Japonica — Known generally as Spirca Japonica, or Hoteia Japonica. A handsome plant, with small, pure white flowers, in large, branching panicles. Blooms in May, in the open air, but is cultivated chiefly for forcing in winter.

#### BOLTONIA (False Chamomile).

Aster-like flowers in a broad head; rosy purple; free blooming, showy and fine; five feet. July to October.



ARONDO DONAX.

#### CONVALLARIA (Lily of the Valley).

Large, luxuriant foliage; flowers small, bell-shaped, in pretty racemes, and very fragrant.

#### DELPHINIUM (Larkspur).

A remarkably showy class of tall growing plants, producing magnificent spikes of blue flowers in summer. We know of no plants which will afford greater satisfaction than these.

#### DICENTRA, OR DIELYTRA (Bleeding Heart).

Spectabilis—A handsome, most curiously formed, rosy-crimson flower, with white and blue tinged protruding stamen: one of the finest border plants; is quite hardy; well adapted for blooming in the winter; one to two feet. May and June.

## DICTAMNUS, FRAXINELLA, OR GAS PLANT.

A choice perennial, forming a bush about two feet high, and bearing spikes of curious red and white flowers, which are fragrant.

Red-Twelve to eighteen inches. June.

White-Twelve to eighteen inches. June.

#### DIGITALIS (Fox Glove).

Flowers purple, yellowish or white, in long terminal racemes; two to three feet. June to August.

#### ERIANTHUS (Ravenna Grass).

Ravenna—Resembles the Pampas grass, but blooms more abundantly. Attains a height of from nine to twelve feet. Being perfectly hardy, is a valuable grass for the decoration of lawns.

#### EULALIA.

These beautiful hardy grasses are deserving of the highest commendation. For the garden they are invaluable, being very showy and ornamental and of easy cultivation. They should be in every collection.

Gracillima — A beautiful ornamental grass with narrow graceful foliage. Very valuable; four feet.

Japonica—The type; a vigorous grower with large plumes; four feet.

Variegata—Handsomely variegated leaves; four feet.

Zebrina (Zebra-striped Eulalia)—One of the most beautiful of ornamental grasses; foliage marked crosswise with bands of white and green.

#### HELENIUM (Sneeze Weed).

Autumnale Superbum—Flowers clear yellow in branching panicles, produced in wonderful profusion; one of the most distinct and striking perennial plants; five feet. September.

#### HELIANTHUS (Sunflower).

Multiflorous fl. pl. (Double Sunflower)—A blaze of gold in late summer and early autumn, and altogether one of the showiest of hardy perennials.

#### HELLEBORUS (Hellebore).

Niger (Christmas Rose)—Beautiful white flowers, blooming in March or April.

#### HIBISCUS (Rose Mallow).

The Hibiscus are valuable border plants, having handsome broad leaves and large showy blossoms.

Albus (Crimson Eye)—Large, showy, white flowers, crimson eye in August. Four to five feet.

Roseus-Large, showy rose flowers in August. Four to five feet.

#### IRIS (Iris, or Fleur de Lis).

Apogon (German Iris)—Golden yellow, striped with plum color; eighteen inches. June.

Kaempferi (Japan Iris)—Flowers differ from the German Iris, in being broad and flat. They exhibit a wonderful variety of colors and shades and appear later than the others. They rank among the most desirable of hardy plants; succeed best in a moist soil; three to four feet. July.

#### PAPAVER (Poppy).

Showy perennials with large flowers of rich and striking colors.

Nudicaule—A fine dwarf kind, with deeply lobed and cut leaves, and pretty yellow flowers on hirsute stems. Excellent for the rockery.

Orientale (Oriental Poppy)—Deep scarlet; large; very showy; eighteen inches. June.

#### PENTSTEMON.

Very ornamental plants, producing long spikes of showy flowers in great abundance.



PHLOX.

#### PHLOX.

These are justly esteemed as the finest of herbaceous plants. They are of dwarf habit, perfectly hardy, of very easy culture, and yield a profusion of bright. showy bloom. They are hardly equaled by any other hardy plant for the decoration of the garden.

#### DWARF HARDY.

No flowers of recent introduction are giving so much satisfaction as the dwarf. large-flowered, perennial phloxes.

They come into flower in July and continue a long time. They can be made to bloom in the autumn by pinching off the shoots about the first of June and again in July.

They are of the easiest culture, blooming the same season as planted, and satisfy everyone who plants them.

The best time to plant is in the fall. They are benefited by a mulch during the winter. Our collection has been selected from the finest varieties and we recommend the following:

Aurora—Flowers large; coppery orange red, crimson center.

Coquelicot—Crimson scarlet; exceedingly attractive.

Eclaireur—Carmine rose; white eye; large flower; earliest of all to bloom.

Feu de Bengal—Fiery red; showy; attractive.

Hercule - Carmine, crimson eye; large flower.

King of the Purples—Dark purple. The most attractive of all the phloxes. New. Lustre—Rose pink, crimson center; large flower; fine.

Miss Theresa Levavasseur—Rose tinted white and marbled crimson; large flower; extra fine.

Neptune—Pure self pink; a lovely flower. One of the best.

Pacher—Flower large; pure self pink. This and the preceding are the only pure pinks we have yet met.

Pluton—Crimson purple; large truss; distinct and fine.

Purite—Pure white; large truss; good habit. This is the best white we have. Rubis—Ruby red; showy; attractive; distinct. A superior variety. Wm. Robinson—Deep rosy salmon with purple eye; large flower, very good.

We also have the following newer varieties of Phlox in stock:

Abyssinie—Light violet.

Amabilis (Caran de Ache)—Cherry red.

Amazone—Pure white.

Aquilon - Deep rose.

Ascanis-Rosy salmon.

Belvidere-Rose.

Brilliant—Bright red.

Capt. Wilhelmy—Crimson.

Chatrain—Rose pink.

Comete-Rosy purple.

Dame des Beauties-Violet.

Enchantment-Violet.

Gladiator-Deep rose.

Iris-Blue.

Innocence—White.

Joseph Gerbaud-White.

Labyrinth—Violet.

La Niege—White.

Le Soneil-Pink.

Lucy Baltet-Blue and white.

Mr. Gladstone—Tender rose.

Mirror des Dames-Rosy crimson.

Ornament—Rose.

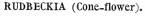
Panorama—Deep rose.

Pyramide-White.

Rosetta-Rosy crimson.

Sybille-Pink.

Torpellier-Rose.



Among the most valuable hardy plants, producing showy golden yellow flowers.

Golden Glow, or Summer Chrysanthemum (Laciniata fl.pl.)—A large, showy plant, attaining in good soil a height of six to eight feet the same season planted. Flowers 3½ inches in diameter, double, well formed, and of a deep golden yellow color, resembling yellow Chrysanthemums, and borne on long stems which render them suitable for cutting. Plants bloom profusely from July till September. One of the best novelties in hardy flowering plants.

#### YUCCA (Spanish Bayonet).

Has a fine appearance; the stem is two feet above the ground, covered with large, bell-shaped flowers on laterals, forming a perfect pyramid; valuable for rockwork.

Filamentosa (Adam's Needle)

— Thread - leaved, creamywhite; three to four feet.
July.



YUCCA

## ROSES.

Soil and Planting—As soon as you have placed your order, attention should be turned to the soil in which you expect to plant. Roses require a rich soil, and while they will do well in any good garden mould, they will do much better if a liberal supply of manure is furnished. Spade up the ground to a depth of from twelve to twenty inches, mixing in some well rotted cow manure. Do not plant in a low spot where drainage is poor; but if you must do so, see that some broken bricks, crockery. cinders, etc., are put at the bottom of the bed to act as an underdrain. Roses on their own roots should be planted just as they stood in the nursery. There is usually a dark earth line to go by-set even with this. Budded or grafted roses must be set so that the junction of stock and graft is two inches below the surface of the soil. Keep the roots of your roses in water until you are ready to plant them, then dig a hole the required depth, set in the plant, spread out the roots naturally, fill it with fine soil, and press it down firmly with hand or foot, water well and shade for a day or two, if the weather is warm and sunny. The distance apart for your roses must be decided by their habit of growth. Strong growers will need a distance of three feet, weaker ones only one or two.

Pruning and Cultivation—At time of planting, all roses should be cut back more or less. After becoming established, pruning should be done in March. It is always best to cut out weak and decayed wood, and such shoots as crowd the plant or prevent light and air from gaining free access. Let what pruning you do be carefully done, and with a sharp knife or pruning shears. The more vigorous varieties may be pruned less than others. The old rule and the best one is, "for weak growing, delicate plants, severe pruning; for vigorous, strong ones, shorten the branches only a little, but thin them out well." To make Hybrid Perpetuals bloom twice in summer, give them a second pruning after their first bloom has fallen in June. Prune for shapeliness of plant and promotion of bloom buds, instead of slashing recklessly among them. Stir the soil frequently about the roots of your roses, and do not plant annuals among them. They must have all the nourishment for themselves if you want them to do their best. Do not let them blossom too much the first year. Let them gather strength into root and stem for next summer, when they will make a grander display.

Protection — Mulch your rose bed heavily with manure in autumn, and for winter protection cover with evergreen boughs. We prefer to stack these about tall roses rather than bend them down. Small ones may be laid over. In hot summer weather give them a light mulch of strawy manure to keep the soil from drying out too rapidly. The rains will wash its nutriment down to the roots.

Hardy Roses include Hybrid Perpetuals, Remontants, which usually bloom profusely during June, and occasionally through the summer and autumn; Austrian, those varieties of yellow roses which bloom but once in a season, and all other kinds which live out of doors without protection through the winter. These are all suited for the garden, and thrive the best in the open air. None of them require winter protection.

The Tender Roses include Teas, Bourbons, Bengals, or Chinas, Noisettes, and all of those sorts which are suited for either the open ground or house culture, not named among the Hardy class. They are all tender and must be removed to the house during the winter, although the Hybrid Teas can be left in the ground if they

are protected by a covering of straw, leaves, evergreen boughs, or something of that kind. They do well in the garden during the summer, and if planted in good soil, most of the varieties will bloom continually.

Climbing Roses are all hardy, and should be planted out of doors. They bloom profusely in June, and some varieties show an occasional blossom during the summer and fall. They are valuable for covering trellises, porches, rocks, etc.

Moss Roses are extremely hardy; most of them are very fragrant; they are excellent June bloomers, and some varieties bloom occasionally during the summer and autumn. The distinctive feature of the class is the "mossy" covering of the green outer leaves of the bud, which gives them an exquisite beauty to be found in no other rose.

Polyantha Roses—A class of roses of much value for bedding purposes, as they form a mass of bloom. They are of a dwarf habit, and are continuously in flower during the entire season. The flowers are produced in numerous clusters, the single ones being about one and a half inches across. The clusters produce from twenty-five to one hundred flowers. The Polyantha Roses are hardy with slight protection. They are especially valuable for planting on the borders of beds of taller growing kinds, or on the edge of foliage beds, as they are constantly in bloom, and rarely attain a height of more than ten or twelve inches. They are also very useful in cemeteries where they at once command close attention.

Rosa Rugosa—A Japanese species, undoubtedly one of the handsomest hardy shrubs in cultivation. It forms a sturdy bush four or five feet high, covered with large, dark green pinnate, glossy foliage, crowned with terminal clusters of ten to twenty flowers, three inches in diameter. It is now well known. Both its rosy crimson and white varieties are found in all good collections and its large, handsome scarlet fruit is most showy during the autumn months. Excellent for cemeteries. Very hardy.

Pruning Hybrid Perpetual and Moss Roses—These bloom best on strong, new wood, and should be cut back severely (say one-half of the last season's growth) in the spring, before growth has commenced. As these roses are hardy, and remain from year to year, they will gradually attain considerable size, and the pruning should be done in a way to keep the plant well balanced and in good shape. Liberal manuring and thorough cultivation add much to the beauty and profusion of bloom of these roses.



## INSECTS.

#### GUARANTEED REMEDIES.

Roses which are strong and vigorous are not likely to be attacked by insects, or, if attacked, are not easily injured. It is highly important, therefore, to keep your plants healthy and in good growing condition by liberal manuring and thorough cultivation. When insects appear, apply the proper remedies promptly and vigorously, and in bad attacks stir the ground deeply with the hoe and rake every day. A little perseverance to resist the present attack is all that is needed; next year you may not be troubled with insects at all. We find that a strong stream of water from a hose applied once a day, either morning or night, will keep our roses free from insects. Where this is impossible, we would suggest the following remedies, which we will guarantee to keep your roses free of any insects, if properly applied and followed up. It is not an experimental remedy, but one that from many years' experience we find is an absolute insect destroyer. It is very inexpensive and can be procured at any drug store. Remember, we guarantee these remedies.

Boil for ten minutes four ounces of quassi chips in a gallon of soft water. Strain off the chips and add four ounces of whale-oil soap, which should be dissolved in it as it cools. Stir well before using. Apply with a clean painter's brush of moderate or small size, brushing every leaf and shoot that is infested. After fifteen or twenty minutes the plants should be washed or syringed with pure water. For mildew, sprinkle lightly with flour of sulphur.

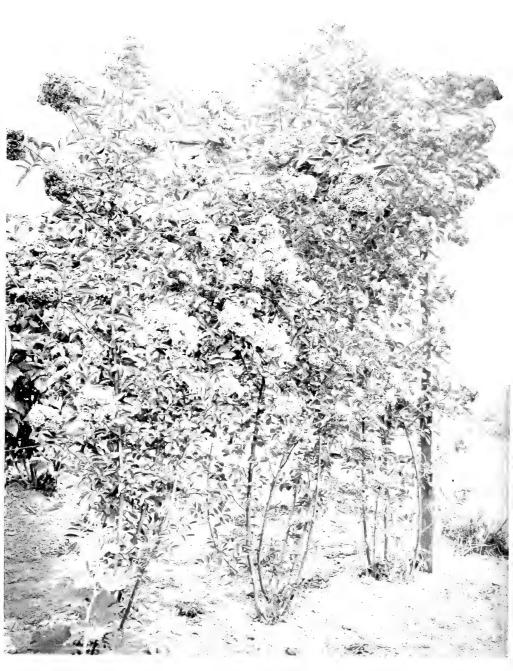
The Rose Bug and other kindred pests are most effectually vanquished by a kerosene emulsion, made as follows: Dissolve one-quarter pound hard soap in two quarts of boiling water, then add one pint of kerosene oil, and stir violently for from three to five minutes, until the ingredients are thoroughly mixed; then dilute to twice its bulk with water, and apply with a spraying syringe, or sprinkle it on the plants with a small whisk broom, and repeat as often as necessary.

Rose Caterpillar appears in May, or about the time the leaves have pushed forth. It can be readily detected, as it glues a leaf or two together to form its shelter. The bushes should be gone over and the glued leaves pinched between the finger and thumb. This is the only effective remedy.

Saw Fly, larva and other insects later than the caterpillar, may be prevented by an occasional syringing, vigorously applied. When they have appeared a sprinkling of powdered white hellebore over the plants will often destroy and disperse them. The plants should be well moistened before applying the hellebore, so that it will remain.

The Red Spider seldom attacks plants in the open air, but confines itself to plants under glass. It may be kept off by daily syringing the plants with water. When plants are once infested with this insect, the fumes of sulphur will alone destroy it. This causes the foliage to drop off, but it is the best remedy.

Mildew is best cured by sulphur and soot. One of these should be applied the moment the disease appears. It is a good plan to previously sprinkle the plants with water, so that the substance applied will adhere.



CRIMSON RAMBLER ROSE (FROM SPECIMENS ON OUR GROUNDS).

#### MANNER OF DESCRIPTION.

ist-Habit of Growth-Vig., free, mod., dwf.

2nd—Color—The prevailing shade in the most perfect development of the flower.

3rd-Size-Small-Flowers from one to two inches in diameter.

Medium—Flowers from two to three inches in diameter. Large—Flowers from three to four inches in diameter. Very Large—Flowers from four to five inches in diameter.

4th—Fullness—Semi-Double: With two or four rows of petals. Double: Having more than four rows of petals, but which show the stamens when fully blown. Full: When the stamens are hid.

5th—Form—Cupped: Inner petals shorter than the outer ones; the latter stand erect and are generally somewhat incurved. Globular: Outer petals are concave with convex edges, folding richly one above the other, tapering from the center. Flat: The surface of the flower is level or nearly even, and all the petals are exposed to view.

6th—Peculiarities of foliage, thorns, number of leaflets, fragrance, etc.

It is hoped the above will make intelligible the terms used to describe the different varieties.

#### ABBREVIATIONS USED, DESCRIBING THE HABIT OF GROWTH.

Vig.—For vigorous, being those varieties which are most rampant in growth and produce long, strong shoots.

Free—Varieties which rank next to the above in growth.

 $\mathit{Mod}.\mathbf{-}\mathrm{Moderate}\,;$  these make a fair, compact growth, but less strong than the preceding.

Dwf.—Dwarf; these are the most delicate or slow-growing sorts. Among hardy roses, those marked dwf, are almost invariably budded.



# HARDY ROSES.

#### CLIMBING ROSES (PRAIRIE, ETC.).

The Prairies are much the most valuable of all the non-remontant climbers. The foliage is rough, large, with five leaflets generally of a dark color; they surpass all climbers in hardiness. The flowers are produced in large clusters late in the season, when other summer roses are gone. When it is desired to cover walls, unsightly buildings, etc., with roses, none will be found to do the work so efficiently.

Baltimore Belle, vig.—Pale blush, becoming nearly white; compact and fine.

Crimson Rambler (The Wonderful New Japanese Rose)—By far the most important and valuable acquisition of recent years The Crimson Rambler is unquestionably an acquisition, a novelty of high order, and most distinct in its characteristics. It is a running or climbing rose of vigorous habit, strong and rapid growth, with handsome, shining foliage, and produces in marvelous abundance, clusters of the brightest crimson semi-double roses. Its clustered form, its brilliancy, the abundance of its bloom, and the great length of time the flowers remain on the plant without falling or losing their brilliancy, are qualities which will make this new claimant for admiration an assured favorite. For verandas, walls, pillars, and fences, it is a most suitable plant. If grown in beds and pegged down it produces marvelous heads of bloom, or it can be grown in bush form and thus become a most striking object. We planted this rose out of doors along with Hybrid Perpetuals and other hardy roses, and the plants came through the winter even better than many of the hardy varieties, remaining fresh and green to the very tips. But it is not only for outdoor use that it is valuable; it can also be employed most satisfactorily for decorating indoors when grown in pots. We are satisfied that this is the greatest rose novelty of recent years.

Gem of the Prairies, free-Red, occasionally blotched with white, large, flat flowers; the only variety in the class which is fragrant.

Queen of the Prairies, vig.—Bright rosy red, frequently with white stripe. Foliage large and quite deeply serrated.



YELLOW RAMBLER.

Wichuriana, or Memorial Rose (Japanese Trailing Rose) — A distinct and valuable variety from Japan; it is a low-trailing species, its stems creeping on the earth almost as closely as the ivy. The flowers are produced in the greatest profusion in clusters on the end of every branch, after the June roses are past, from the first week in July throughout the month. They are pure white, one and one-half to two inches across, with yellow stamens, and have the strong fragrance of the Banksia rose. It is quite hardy, with the exception of the latest immature growth, which may be cut back to some extent. This variety has proved valuable as a covering for banks, rockeries, etc., and for use in cemeteries.

White Rambler (Thalia)—Small or medium, daisy-like, pretty white flowers in large clusters; fragrant, very ornamental.

Yellow Rambler (Aglaia)—Flowers two to two and a half inches in diameter, in clusters of six to ten. Yellow in bud, but white when fully open; when half open the flowers are tinged with yellow, slightly fragrant. Plant vigorous and free-blooming; hardy, very pretty and desirable.

#### MOSS ROSES.

The Moss Roses are favorites with every one, on account of the beautiful buds, which, for bouquets and cut flowers, are invaluable. They are subject to mildew, require close pruning and high culture, but amply repay careful attention by the increased size and beauty of the flowers. They are all very hardy. The foliage is generally somewhat crimpled, and has mostly seven leaflets.

Blanche Moreau, vig.—Pure white, large, full, and of perfect form; the buds and flowers are produced in clusters, and freely furnished with a deep green moss. A valuable variety.

Comtesse de Murinais, vig.—White, tinged with flesh.

Crested Moss, free—Deep pink-colored buds, surrounded with a mossy fringe and crest; free from mildew. A fragrant, very beautiful rose.

Pink Moss, free—Pale rose, very beautiful buds. A great favorite.

Princess Adelaide, vig.—Pale rose, of medium size and good form. Foliage often blotched or variegated. Good in bud and flower. Do not prune this variety severely.

Salet, free or vig.—Light rose, large, full; pretty in bud.

White Bath, mod.—White, sometimes tinged with flesh; attractive in bud and open flower. The best white moss.

#### HYBRID NOISETTE ROSES.

This is a modern group of considerable importance, obtained chiefly from crosses between Remontant, Bourbon, and Noisette Roses. They generally flower in small clusters and bloom freely throughout the year. The flowers are mostly white, and, though small, are generally of good form. They are of about the same hardiness as the Bourbons and Hybrid Teas, requiring a little more care in their protection than the Hybrid Perpetuals.

- Coquette des Alpes, vig. or free—White, slightly shaded with carmine; medium size; form semi-cupped; wood long-jointed; larger flowers than the others. The strongest grower of the entire class.
- Coquette des Blanches, vig. or free—Pure white, sometimes faintly tinged with pink; flowers of medium size, somewhat flat, but full and very pretty; growth more bushy and symmetrical than any of the others. One of the hardiest. Later than the rest in coming into flower.
- Eliza Boelle, mod.—White, delicately tinged with pink; medium size; full, beautiful circular form. An exquisite rose.

#### RUGOSA ROSES AND THEIR HYBRIDS.

This is a very interesting group of Japanese origin. The flowers are mostly single. The plant is highly ornamental on account of its good habit and beautiful, glossy foliage.

- Madame G. Bruant, vig.—The first of a new race of hybrids. In the bud state the flowers are long and pointed; when open semi-double; pure white and fragrant, and produced freely in clusters at intervals throughout the summer; exceptionally hardy and vigorous; forms a handsome bush.
- Rugosa Alba, mod.—A species from Japan. Single pure white flowers, of five petals; highly scented; a splendid shrub.
- Rugosa Rubra, vig.—Another Japan variety. Flowers single, of a most beautiful bright rosy crimson, succeeded by large berries, of a rich rosy red color, and are a great addition to the ornamental character of the plant.

## HYBRID REMONTANT, OR HYBRID PERPETUAL ROSES, AND HYBRID TEAS.

This class thrives the best in a rich soil. The pruning should be regulated by the habit of growth, the weak shoots closely cut in, those which are vigorous left longer. Most of the varieties are fragrant; some of them, like Alfred Colomb, Mme. Victor Verdier, etc., are most deliciously perfumed.

Although they are styled *perpetual* bloomers, none of them are such in reality. However, many of them yield a fair second crop of flowers in the autumn, which is very acceptable. Aside from this, there is no class, take it all in all, so popular and which gives such general satisfaction.

- Alfred Colomb, free—Raised from Jacqueminot. Brilliant carmine crimson; very large, full, and of fine globular form; extremely fragrant, and in every respect a superb sort. Green wood with occasional pale greenish thorns; foliage large and handsome. One of the most useful sorts for general cultivation.
- American Beauty, vig.—Large, globular; deep pink shaded with carmine; delicious odor; has proved to be a most desirable variety for forcing.



LIBERTY.

Anne de Diesbach, vig.—Raised from La Reine. Carmine, a beautiful shade; very large. A superior garden sort; fragrant; one of the hardiest. Valuable for forcing. Baron de Bonstetten, vig.—Rich velvety maroon; large, full. A splendid sort.

Baroness Rothschild, mod. or dwf.—Light pink; cupped form; very symmetrical; without fragrance. Very distinct and beautiful; one of the finest exhibition varieties. The wood is short-jointed; very hardy and a late bloomer.

Clio—Raised by William Paul & Son, the celebrated English rose growers. Flowers large, of fine, globular form, flesh color, shaded in the center with rosy pink; growth vigorous; handsome foliage. One of the finest new roses.

Countess of Oxford, mod.—Bright carmine, fading in the sun; very large and full; not fragrant. Wood almost thornless; foliage very handsome, large and distinct. Fine in bud; valuable for forcing.

Earl of Dufferin, vig.—One of the finest roses of recent years. Rich, brilliant, velvety crimson, shaded with dark maroon; large, full, finely formed; delightful fragrance. A vigorous grower. One of the finest dark roses. It should be in every collection.

Fisher Holmes, free or vig.—Deep, glowing crimson; large, moderately full, and of fine imbricated form. A superb rose.

Francois Levet, vig.—Cherry red; medium size; well formed; free bloomer. Valuable on account of its vigorous habit.

General Jacqueminot, vig.—Brilliant crimson; not full, but large and extremely effective; fragrant, and of excellent hardy habit; forces well.

Jean Liabaud, free—This is one of the very darkest of all roses; the flowers are large, full and fragrant, and of the most intense dark rich velvety crimson imaginable.



LA FRANCE.

John Hopper, free—Bright rose with carmine center; large and full. A profuse bloomer and standard sort.

John Keynes, free—Of a brilliant red, shaded with velvety crimson; magnificent buds; a variety that is very satisfactory to all lovers of roses; good grower; quite hardy.

Jubilee, vig.—A grand new rose first offered to the public in summer of 1897. It is a true hybrid perpetual, perfectly hardy, blooming in fall as well as in early summer; bush vigorous, foliage dark green, an abundant bloomer, flowers very large, reaching six inches across under high culture, color purest and deepest red, shading to deep crimson and velvety maroon.

Jules Margottin, free—Bright cherry red: large; well formed; fragrant flowers.

Lady Helen Stewart, vig.—Bright crimson scarlet; large, full, and of perfect form, produced on long stiff stems, highly perfumed; distinct and fine. A beautiful and valuable variety.

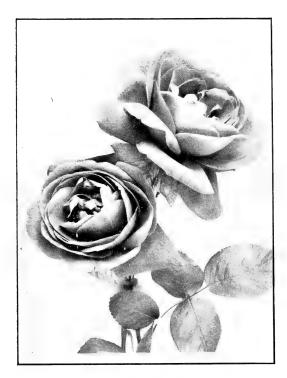
La France (Hybrid Tea), mod.—Raised from seed of a tea rose. Delicate silvery rose, changing to silvery pink; very large; full, of fine globular form; a most constant bloomer; the sweetest, and one of the most useful of all roses.

La Reine, free or vig.—Glossy rose, large, moderately full; very free flowering, and one of the most hardy. A useful rose, though no longer queen.

Liberty (Hybrid Tea), free—A grand new rose surpassing Meteor in brilliancy and purity of color. A free bloomer and retains its brilliancy of coloring a remarkably long time after being cut. Resembles Jacqueminot in size and fragrance. (See cut, page 88.)

Mabel Morrison, mod.—White, sometimes tinged with blush; in the autumn the edges of the petals are often pink. In all, save color and substance of petals, this variety is identical with Baroness Rothschild. A very valuable white rose.

Madame Charles Wood, free-Flowers of a large size; color dazzling crimson; a constant bloomer.



MADAME GABRIEL LUIZET.

- Madam Gabriel Luizet, vig. or free—Pink, distinct, very large, cupped shape; somewhat fragrant. One of the finest roses in the catalogue.
- Madame Plantier, free—Pure white; above medium size; produced in great abundance early in the season. One of the best hardy white roses.
- Madame Victor Verdier, mod.

  —Carmine crimson; large, full, very fragrant; excellent.
- Magna Charta, vig.—Pink, suffused with carmine; full, globular. Foliage and wood light green, with numerous dark spines. A fragrant, excellent rose. Valuable for forcing.
- Marshall P. Wilder, vig.—
  Raised from the seed of
  Gen. Jacqueminot. It is of
  vigorous growth, with
  healthy foliage; flowers
  large, semi-globular, full,
  well formed; color, cherry
  carmine, much like a lightcolored Marie Baumann,
  or a shade deeper than
  Marie Rady, and very fragrant. In wood, foliage,

and form of flower, it resembles Alfred Colomb, but the seedling excels that famous variety in vigor, hardiness, and freedom of bloom. It continues to bloom profusely long after the other Remontants are out of flower. In brief, it may be described as an improved Alfred Colomb, and as good a rose as has been raised by anyone. It is undoubtedly the finest of its color.

- Marchioness of Londonderry, free—A new White Hybrid Perpetual, and one of the best introductions of the Messrs. Dickson & Sons of Newtownards, Ireland. Flowers of great size, measuring seven inches across, perfectly formed and carried on stout stems. Color ivory white; petals of great substance, shell-shaped and reflexed; free-flowering; highly perfumed; growth vigorous, and foliage very handsome. One of the finest roses. Awarded the gold medal of the National Rose Society of England. We have had this variety in flower for several seasons, and regard it as a decided acquisition to the list of hardy; white roses. Requires some protection in winter.
- Margaret Dickson, vig.—Of magnificent form; white, with pale flesh center; petals very large, shell-shaped and of great substance; (fragrant; a very promising variety; foliage very large, dark green.
- Meteor (Hybrid Tea) vig.—A rich dark, velvety crimson, ever-blooming rose, as fine in color as the best of the Hybrid Perpetuals; the flowers are of good size, very double and perfect in shape, either as buds or when fully opened; the plant is vigorous and remarkably free flowering. A splendid sort for pot culture, and the best of all the Hybrid teas as a bedding variety for summer cut flowers, as it retains its color well, even in the hottest weather.



MARGARET DICKSON.

Pierre Notting, free — Deep maroon, illumined with bright crimson, often suffused with velvet; large, or very large; globular form, pointed buds; highly scented. A superb dark rose, often at its best in the autumn.

Prince Camille de Rohan, free— Deep velvety crimson; large, moderately full; a splendid rose.

Soleil d'Or (Golden Sun) vig.—A beautiful new hybrid perpetual rose. A robust, vigorous grower and free bloomer Color, a rich golden yellow shaded with a beautiful deep red. The grandest rose ever introduced, and is bound to please the most fastidious. Perfectly hardy. No rose garden complete without this latest novelty.

Souv. de Wootton (Hybrid Tea), vig.—A beautiful shade of rosy crimson, delightfully fragrant: a constant and most prolific bloomer, every new shoot crowned with one or more buds.

Mrs. R. G. Sharman Crawford, vig.—Raised by Dickson & Sons of Newtownards, Ireland. Color deep rosy pink, outer petals shaded with pale flesh, white at base of petals; flowers large, of perfect imbricated form, and freely produced, flowering from early summer until late in autumn. Growth vigorous. Awarded gold medal of the National Rose Society of England.

Mrs. John Laing, vig.—Soft pink; large and of fine form, produced on strong stems; exceedingly fragrant; one of the most valuable varieties for forcing, and flowers continuously in the open ground. One of the most beautiful roses of recent introduction. (See cut, p. 93.)

Paul Neyron, vig.—Deep rose color; good tough foliage; wood rather smooth; by far the largest variety in cultivation. A free bloomer; very desirable as a garden rose; valuable for forcing.



SOLEIL D'OR.



WILLIAM MCKINLEY.

Ulrich Brunner, vig.—Brilliant cherry red, a very effective color; flowers of fine form and finish, carried well upon the plant; petals of great substance; plant vigorous, hardy, and resists mildew. One of the best varieties for forcing and open-air culture.

Victor Verdier, mod.—Bright rose, with carmine center, a very fresh shade of color; not fragrant; free bloomer; wood nearly smooth. This variety, with its numerous progeny, is more tender than any of the other types in the class. A beautiful rose.

William McKinley, vig.—Introduced by us. A beautiful new Hybrid Perpetual rose. It has been thoroughly tested by us, and found to possess most excellent qualities. Of very vigorous growth and a free bloomer. Color, clear rose or pink. Large, full, finely formed flower.

#### AUSTRIAN ROSES.

This class flowers on extreme ends of wood of previous season's growth; very little pruning is therefore required.

Harrison's Yellow, free—Double; bright yellow; very showy and fine.

Persian Yellow, free—Deep, bright yellow; small but handsome; double; a very early bloomer, and much the finest hardy yellow rose. This does best when budded.



MRS. JOHN LAING.

#### TEA ROSES.

Bon Silene, free—Equally valuable for summer or winter blooming. Buds of beautiful form; an unusually free bloomer; color deep rose, shaded with carmine.

Catherine Mermet, mod.—One of the finest roses grown. The buds are very large and globular, the petals being recurved and showing to advantage the lovely bright pink of the center, shading into light creamy pink, reminding one of La France in its silvery shading. A strong grower and fine bloomer.

Etoile de Lyon, free—This we consider one of the finest yellow budding roses for outside planting, and one of the hardiest in the tea section. Flower very large and double and deliciously fragrant; color, chrome yellow, deepening in center to pure golden yellow.

Gloire de Dijon, vig.—Noted for its large-sized flowers, its delicate tea scent, and its exquisite shades of color, being a blending of amber, carmine and cream.

Marechal Neil, free—A beautiful deep yellow; large and globular; fragrant; free flowering; one of the finest yellow tea-scented roses; a good climber. Well known and deservedly popular.

Niphetos, dwf.—Snowy white; long pointed buds; of no use for outdoor planting, but for winter forcing one of the best, as no rose blooms freer and finer under glass. Remains in the bud state a long time.

Papa Gontier, vig.—A magnificent red Tea. It is a strong grower, with fine healthy foliage; the buds are large and long, with thick, broad petals of dark carmine crimson color, changing to a lighter shade in the open flower. An excellent winter-blooming variety, and one of the best for outdoor planting, opening up its flowers beautifully.

Perle des Jardins, free—A beautiful straw color, sometimes deep canary; very large, full and of fine form; stiff shoots or stems, and very free flowering.

The Bride, free—A lovely, pure white Tea Rose of large size. Admirable for forcing, as well as for summer flowering. The buds have more substance than Niphetos, are full and double and possess the good characteristics of Catharine Mermet.

#### POLYANTHA, OR FAIRY ROSES.

This is an interesting group from Japan. The foliage and flowers are both very small, the latter being produced *in panicles*. The original varieties are nonremontant, but what we offer are crosses or hybrids, natural or artificial, between the single flowered Polyantha and varieties of other classes, Teas, etc. They are ever blooming, of slender growth, produce extremely beautiful little flowers and are quite as hardy as the Hybrid Noisettes and Hybrid Teas. Their character of blossoming in panicled clusters, gives them a distinctive interest, and they are much esteemed. As an edging for a bed of monthly roses they are very effective and useful. We are greatly pleased with them, and strongly recommend them to all devotees of the rose.

Cecile Brunner—Larger flowers than most of the others; perfectly double and delightfully fragrant; color rosy pink, on rich creamy white ground; a great bloomer; very satisfactory for bedding.



CLOTHILDE SOUPERT.

Clothilde Soupert (the new Tea Polyantha) -This lovely rose comes from the Garden of Luxembourg, France. It belongs to the Polyantha class, but resembles the Tea Roses so closely that it is called a Tea-Polyantha, and is undoubtedly the finest rose of its class. The flowers are borne in clusters, and are of large size, round, flat form, with beautifully imbricated petals; perfectly full and double, and deliciously sweet; color beautiful pinkish amber or pale creamy yellow, delicately flushed with silvery rose, sometimes ivory white, exquisitely tinted with pale salmon, and sometimes both red and white flowers are produced on the same plant. The bush is a vigorous and compact grower, and a continuous and remarkably profuse

bloomer, being literally loaded with roses throughout the whole growing season. It is highly recommended for bedding in open ground, and also for window and house culture; moderately hardy if given a good covering of leaves and litter before winter begins.

Etoile d'Or—This elegant rose is certainly a great acquisition; full, round flowers, perfectly double, borne in large clusters; pale chrome yellow, with rich citron-red center; blooms quickly and profusely, besides being exceedingly beautiful.

Little White Pet—A very charming Fairy Rose; flowers of perfect form, very double and full; pure creamy white, sometimes delicately tinged with salmon rose.

#### TREE ROSES

These beautiful novelties are without question the most pleasing and beautiful of anything ever offered in the rose line. There is nothing in the history of horticulture that is more beautiful than the Tree Rose. We import them direct from the very best Holland growers, and our stock is exceptionally strong and fine.

The Tree Rose is grown by budding strong growing varieties of the best H. P. roses on what is known as cinnamon stock, or Dutch Dog roses. They are budded from three and a half to four feet from the ground, thus forming a beautiful small tree. With proper care, pruning and cultivation, they succeed well. We know of nothing in the entire catalogue that will attract more attention and give more pleasure than the Tree Rose.

In addition to the Crimson Rambler, we offer them in pink, red, white and vellow.

Crimson Rambler (Tree form) - Nothing in the line of roses has so completely captivated the ladies as the Ramblers. It is not hard to determine the reason. Outside of their gorgeous effect as climbers, the ramblers for cutting purposes, cover a large field of adaptability. For all indoor decorations they make a vivid and striking display, and for corsage bouquets they are unsurpassed, owing to the fact that the slender stems will support hundreds of beautiful flowers and buds. But when grown in tree form, the Crimson Rambler reaches the ideal of perfection, and is incomparably beautiful. The novelty of its form and growth combine to make the Crimson Rambler Tree Rose one of the most ornamental and desirable decorative plants. It is perfectly hardy, and may be trimmed into any desired form.



CRIMSON RAMBLER (TREE FORM).

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